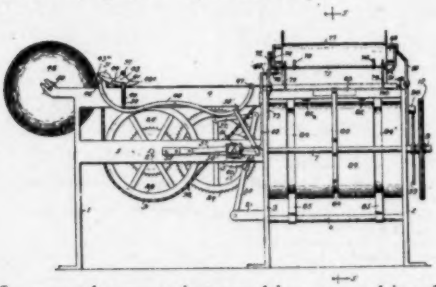
WHAT'S NEW?

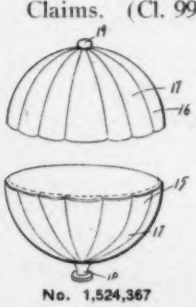
New Patents

1,525,812. Stick-Candy Wrapping Machine. Michael P. Kenna, deceased, by Mary E. Kenna, executrix, Dubuque, Iowa. Filed June 20, 1922. Serial No. 569,607. 17 Claims. (Cl. 93—5.)

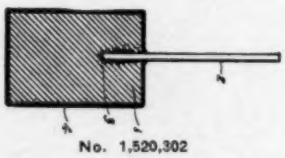


1. In a candy wrapping machine, a machine frame, means on said frame for supporting a paper roll having a strip unwound therefrom, a power shaft journaled in the machine frame, meshing gears journaled on said frame, operative connections between the power shaft and gears for effecting oscillatory movement thereof, and means operated by said gears and associated with the paper strip for unwinding the same from the roll and delivering the strip to candy wrapping mechanism in a step by step movement.

1,524,367. Confection. John G. Papageorge, Erie, Pa. Filed Sept. 22, 1922. Serial No. 589,821. 2 Claims. (Cl. 99—11.)



No. 1,524,367



No. 1,520,302

2. An edible container for confections comprising cup-shaped members formed of tapered and fluted sections having weakened portions connecting the sections, and a button formed integral with and connecting the small ends of the tapered and fluted sections of one member to permit of the button being removed to provide an opening in the member at the small ends of the sections, and a solid knob-shaped handle for supporting the other section.

1,520,302. Frozen Confection. William C. Morgan, Everett, Wash., assignor to Zero Ice Cream Dipping Machine Company, Inc., Everett, Wash. Filed Feb. 20, 1922. Serial No. 537,922. 2 Claims. (Cl. 99—16.)

1. The method of applying a wooden stem to an ice cream bar of a character described, which consists of moistening the stem in warm water, inserting the same within the bar while the latter is at a temperature of about zero degree.

New Chocolate Tubing Machine

The A. D. Fisher Mfg. Co. of Toronto have perfected and successfully demonstrated a machine which produces a chocolate tube of any desired length, diameter or thickness from a cold cake of chocolate by cold pressure of 100,000 pounds, automatically fills the tube with fondant or any desired filling and seals the ends ready for wrapping. Neither the chocolate nor the cream filling is reheated thus insuring a finer quality of product.

The ten pound cake of chocolate is fed into the machine in the cold hard state and comes out the same way, without reheating, in form of a perfect tube of any desired thickness of wall or shape at the rate of five feet (more or less) per minute perfectly cold and ready to handle. The machine automatically measures and cuts the tube to any desired length.

The handling of the cream filling is simplified, the virgin cream fondant is taken directly from the cream beater and put into a specially constructed machine which further mills and refines the cream without reheating, measures the exact amount of cream necessary and fills the tube (one end of which has been previously sealed by another machine) with a single stroke, it is then ready for sealing on the top end and final wrapping. All starch or other processes have been eliminated. There is no waste or loss in either chocolate or cream and labor is reduced to a minimum.

From a sanitary standpoint there is no need for the naked hands to touch either the chocolate or cream from beginning to end of manufacturing process. This fact should be very attractive to the public and afford excellent advertising potentials.

The machinery for making chocolate tubing product complete as described above takes up very little floor space, comparatively speaking, for a single unit. The principal machine for making the tubing has been perfected to a point where it is practically fool proof and anyone can operate it after an hour's instruction. While the machine is very powerful, generating up to 100,000 pounds in pressure, it requires only ½-H. P. motor to drive it.

With a single unit, Mr. Fisher claims, he can produce an article of superior quality to any chocolate bar and sell it for 5 cents retail, allow the dealer and jobber his usual discounts and have a satisfactory manufacturing profit; the 10-cent size would be very profitable, indeed.

Patents have been granted to Mr. Fisher with others pending in Canada, United States and foreign countries. While he has had several offers for Canadian rights, he proposes for the time being to operate his demonstrating unit under the name of The Chocolate Tube Co., Ltd.

We understand that manufacturing rights will be granted to firms in United States for state or territorial distribution of chocolate tube products. Mr. Fisher will be glad to hear from any responsible firms interested in the process.

The Manufacturing Confectioner's BLUE BOOK SUPPLEMENT

THE purpose of this department is to supply current information which will supplement the data published in The Blue Book in the interim between its annual editions. New products, new sources of supply, new statistics and reference data, corrections, etc., are published in this department to be entered in their proper place in The Blue Book for permanent reference.

Enter on Page 125, The Blue Book

AGAR AGAR

Atkins, Kroll & Co., San Francisco, Calif.
See Their Adv. in The Manufacturing Confectioner.
Dodwell & Co., Ltd., 161 Water St., New York City.
See Their Adv. in The Manufacturing Confectioner.

Enter on Page 138, The Blue Book

EGG ALBUMEN

Dodwell & Co., Ltd., 161 Water St., New York City.
See Their Adv. in The Manufacturing Confectioner.

Enter on Page 131, The Blue Book

COCONUT, DESICCATED

Atkins, Kroll & Co., San Francisco, Calif.
See Their Adv. in The Manufacturing Confectioner.
Dodwell & Co., Ltd., 161 Water St., New York City.
See Their Adv. in The Manufacturing Confectioner.

Enter on Page 128, The Blue Book

CACAO BEANS

Atkins, Kroll & Co., San Francisco, Calif.
See Their Adv. in The Manufacturing Confectioner.

Enter on Page 160, The Blue Book

GUM TRAGACANTH

Dodwell & Co., Ltd., 161 Water St., New York City.
See Their Adv. in The Manufacturing Confectioner.

Enter on Page 166, The Blue Book

MENTHOL CHRYSTALS

Atkins, Kroll & Co., San Francisco, Calif.
See Their Adv. in The Manufacturing Confectioner.

Enter on Page 265, The Blue Book

PAIL, WOOD

Great Northern Pail Co., Gillett, Wis.
See Their Adv. in The Manufacturing Confectioner.

Supplementing Pages 349-353

WESTERN CONFECTIONERS' ASSOCIATION.

Elected January 22, 1925.

President: A. J. Bale, Pacific Coast Biscuit Co., Portland, Oregon.
1st Vice-President: G. H. Thompson, G. H. Thompson, Inc., Seattle, Wash.
2nd Vice-President: E. A. Hoffman, E. A. Hoffman Candy Co., Los Angeles, Calif.
Secretary-Treasurer: John D. Giles, Cullen Manufacturing Co., Salt Lake City, Utah.
Executive Secretary: Fred G. Taylor, Ogden, Utah.

MIDLAND CONFECTIONERS' ASSOCIATION.

Elected February 19, 1925.

President: A. R. Scheble, Richards-Scheble Candy Co., Hutchison, Kansas.
Vice-President: L. C. Blunt, W. C. Nevin Candy Co., Denver, Colo.
Vice-President: C. C. Chase, Chase Candy Co., St. Joseph, Mo.
Secretary-Treasurer: A. H. Newman, 1101 Garland Bldg., Chicago, Ill.

BALTIMORE MANUFACTURING CONFECTIONERS' ASSOCIATION.

Officers Elected January 14, 1925.

President: Louis A. Doekman, John H. Doekman Candy Co.
Vice-President: Elmer H. Josselyn, E. H. Josselyn Company.
Secretary-Treasurer: Frank G. Uhlenberg, Blue Ribbon Candy Co.

INDIANA CONFECTIONERS' CLUB.

Officers Elected January 29, 1925.

President: Frank Bott, Logansport.
1st Vice-President: A. G. Sterm, Evansville.
2nd Vice-President: E. E. Wood, Indianapolis.
Secretary-Treasurer: E. E. Nichols, Indianapolis.

Executive Committee.

Omar C. Mewhinney, Terre Haute.
W. C. Diekmeyer, Ft. Wayne.
Oscar Heider, Indianapolis.

NEW YORK CONFECTIONERS' AND ICE CREAM MANUFACTURERS' PROTECTIVE ASSOCIATION.

Officers Recently Elected.

President: A. G. Intemann, Jr.
1st Vice-President: Henry Brunjes.
2nd Vice-President: Peter Fisk.
Treasurer: D. H. Brinkmann.
Financial Secretary: Louis Thieke.
Secretary: C. H. Holtzer.

ST. LOUIS CANDY JOBBERS' ASSOCIATION.

Officers Recently Elected.

President: Gustaf C. Ohmer.
Vice-President: Wm. Amelung.
Secretary: F. X. Hanneeke.
Treasurer: J. H. Schwarze.

THE COLUMBUS CONFECTIONER'S ASSOCIATION.

President: KINSELL CRANE.
Vice-President: D. A. ROBY.
Secretary-Treasurer: A. B. ASHMAN.

THE BIRMINGHAM CANDY CLUB

Birmingham, Ala.

List of Members:

Magic City Candy Co.
American Bakeries Co.
Imperial Candy Co.
Levin-Abelson Candy & Grocery Co.
Wynn-Knox Candy Co.
Beck Candy & Grocery Co.
Martin Biscuit Co.
Jo-Pe-Nut Products Co.

THE NEW YORK CANDY CLUB.

President: JAMES FREEL.
Vice-President: DAN W. GILLETTE.
Secretary: BENJAMIN HURWITZ.
Treasurer: HERMAN EITELBERG.

THE BOARD OF DIRECTORS.

Milton M. Cohn.
David McGarry.
Morris Gleiman.

The Manufacturing Confectioner's TROUBLE CHART

Compiled by Adrian LeRoy

III Caramel Work

This is the third of a series of eighteen charts which will cover practically every kind of confectionery. The first chart on "Chocolate" appeared in January issue. The second on "Cream Work" appeared in the previous issue.

Caramels grain.
- Stirers too close to side of pan.
- Insufficient glucose.
- Slow boiling.
- Batch too far below steam level.
- Sides of pan crystalized.
- Too much handling on slab.
- Weak glucose.
- Stirers left running after batch has finished.

Caramels go sticky.
- Too much glucose.
- Insufficient fat.
- Insufficient flour.
- Bad flour.
- (Try Sago or tapioca.)
- Left too long before being wrapped.
- Damp room.
- Machine not wrapping completely.
- Poorly waxed paper.
- Too much scrap.
- Too much acid in scrap.
- Milk not suitable for caramels.
- Atmospheric conditions—too much humidity.

Paper sticks to caramels few days after being wrapped, but caramels were not sticky before wrapping.
- Caramels chilled before being wrapped.

No chew in caramels.
- Soft, inferior fat.
- Insufficient milk.
- Boiled too high.

Caramels have a sour smell after a few weeks old.
- Too much flour or starch used for dusting purposes; flour or starch has fermented.

Caramels break in wrapping machine.
- Insufficient fat.
- Bad cutting.
- Incorrect machine timing.
- Boiled too high.

Caramels stick to cutting knives.
- Insufficient fat in batch.
- Fat not suitable.
- Batch grained off.

Caramels bad color.
- Too much glucose.
- Slow boiling.
- Too much scrap.
- Too far below steam level in cooker.

Caramels eat rough—not as smooth as usual.
- Flour paste improperly made.
- Too much fondant.
- Fat not properly incorporated before adding flour.
- Gelatine not soaked enough.
- Slow boiling.

Fat will not boil in.
- Added too late.
- Not added gradually.
- Low geared stirers.

Cast caramels leak through chocolate.
- Boiled too low.
- Too much corn syrup.
- Not left long enough in drying room.
- Faulty dipping ("drop" dipping best for this center).
- Caramels sweaty or sticky before dipping.
- Allowed to stand too long before dipping.
- Not right consistency of milk used.
- Caramel fat of too low melting point.
- Not enough gelatine in batch.

Chocolate coating cracks on cast caramel.
- See Chocolate Trouble chart in January issue of this publication.

Cheap scrap caramels stand up but short time.
- Too much acid in batch.
- Insufficient fat.
- Low melting fat.
- Not enough gelatine.
- Boiled too low.
- Too much glucose.

High grade caramels won't stand up—goes sticky or flattens out.
- Boiled too low.
- Boiled too slow.
- Too much corn syrup.
- Corn syrup too strong.
- Inferior fat—no setting power.
- Not enough gelatine.
- Too much water used to soak gelatine.
- Watery milk.
- (Try a little whipped albumen; try a little sago or tapioca flour; try a few fresh egg yolks.)

English cream caramels (unwrapped) will not stand up.
- Not pulled correctly, contains air pockets.
- Not kept in dry room long enough before "kneading up."

Cream centered caramels "grain off."
- Caramel too hot when sandwiching with fondant.
- (See also "Caramels Grain.")

The Competitor's Viewpoint

(An Editorial)

ARE you interested in what your competitors are saying among themselves about your sales methods? You may thing that it makes no difference what they think or what they say.

But it does, for each one of your competitors of any consequence is watching your every move in order to prevent you from getting business away from him. Just as soon as you make a move he is going to go you one better if he can. You give a discount. He gives an extra discount. You give an extra box of candy, and he offers a more liberal bonus.

Are you any better off in the long run? You have reduced your profits. Your competitor has reduced his profits, and neither has materially increased his sales—nor has the ultimate consumer benefited. Such practices do not increase the consumption of candy, they merely demoralize the industry.

We understand that one firm has three different price lists which serve his salesmen as successive entrenchments or breastworks to which he can retreat if necessary, in order to win business from competitors. The keener the competition and the shrewder the buyer, the lower the price. This has set every other manufacturer to sharpening his pencil and figuring out how he can meet this new attack.

Still more insidious is the practice of giving extra packages or extra weight. The price quoted is per dozen packages, but the dealer receives one or two extra packages without additional charge.

Probably the most difficult and unfair competition to meet is that of the manufacturer who does not know his actual costs. He sells by guess, neglecting to include in many items, such as bad debts, returned goods, cost of packing and shipping, etc. In many cases his estimates does not coincide with his actual costs. He figures on a larger output per operator or machine than he is actually getting, or his material cost may be wrong. Here is an illustration of the latter:

A certain manufacturer of chocolate dipped cordial cherries figured his costs on the basis that a certain number would weigh just a pound. He is selling them to dealers by count. In some shipments the number supposed to weigh one pound was actually three to five ounces overweight. This extra weight is all in the coating. Since these are sold at a competitive price, it is evident that he is losing money on many shipments. He is making dealers a present of twenty to twenty-five per cent more weight without knowing it.

The pity of the situation is that the manufacturer who figures his cost inaccurately not only squanders his own money without return, but also robs others of a legitimate return on the money and ability and energy which they are putting into their business.

Still another form of distressing competition is the putting out of cheap imitations of an advertised or established product.

The way the market for Jordan almonds, cocoanut strips, some classes of bar goods and other items has been ruined by inferior products is a matter of common knowledge among the trade. The way in which cheap imitations of better grade goods have killed the demand and lessened the general consumption of candy is well understood. It shows how some manufacturers, for the sake of a temporary gain, do not hesitate to kill the goose that lays the golden egg.

Another type of competition is the imitation of a particular product for which there is a growing demand. Some manufacturer brings out a particularly attractive piece of candy, spends money in advertising it and securing a large distribution for it. Immediately every other manufacturer brings out something similar, trying to divert into their own coffers business and profits that rightfully belong to the originator of the product.

And so on ad infinitum—might one continue the story of the way in which competitors are milling around in an endless circle of cutting profits to get more business at less and less profit.

No wonder there are so few really profitable candy firms.

And the answer? There is none but for each manufacturer individually to maintain a quality standard for his product, to make sure that his own practices are economically sound and that his sales force is not indulging in destructive or unfair competition. Each firm should know its cost accurately and be sure that there is a reasonable profit in every sale.

Does Sales Research Pay?

(*Continued from page* 12)

Finding that this method did not work, he followed the next time an entirely different process. Instead of asking each girl to select formally the most attractive box, he let it be known that after the line had been decided upon the sample boxes under consideration would be given to any of the girls that wanted them. Permission was given to the girls to indicate in advance which box she would prefer for her own use. The selections made under these circumstances were perfectly natural and resulted in the manufacturer getting a much clearer idea of the appeal made by each box.

On to Boston, June 1-5

Some News and Views About the N. C. A. Convention and Exposition

THE convention committee has not as yet released information in detail about the program, however we have good reason to believe that the Boston convention of the N. C. A. will eclipse all previous annual meetings from the standpoint of a genuine business conference. The convention proper opens as usual on Wednesday, but there will be something doing the entire week.

For instance, on Monday, June 1st, the annual golf tournament will be held. At one o'clock of the same day the Exposition will be opened and will remain open until midnight on Friday, June 5th.

On Tuesday there will probably be a conference of package goods manufacturers, as usual. No official word has been issued about this meeting, but we do know that many of the package goods people are keenly interested in mobilizing for a cooperative advertising campaign. The makers of package candies perhaps have more in common from a selling standpoint than other divisions of the manufacturing fraternity and therefore it is quite logical that in the interim of getting a plan which is workable and acceptable to the entire membership of the National Confectioners' Association, that the package goods manufacturers get together and launch a campaign which will not only proclaim the special merits of packaged candies and justify the prices of same, but also lay a foundation of fact regarding the product which will have an elevating and constructive effect on the entire confectionery industry. Bring your ideas on this subject to Boston and you will find an opportunity some time during convention week to meet in special conference with other manufacturers who are taking the initiative in this forward movement.

On Wednesday the N. C. A. convention opens. Following the President's address will be a prominent speaker now under consideration. The afternoon session will consist of three or four short, practical addresses by prominent men in the industry on some phase of the subjects of production, costs, etc. An open discussion will follow.

The outstanding feature of the Thursday forenoon session will be an address by Judge Moses H. Grossman of New York City. Mr. Grossman is Acting President of the Arbitration Society of America and is a well-known authority on this subject.

The afternoon session on Thursday will be devoted to a distribution conference, at which there will be a number of short addresses by men from leading firms in the industry on various phases of the subject of selling specialty and package goods. A special invitation is extended all members to participate in the open discussions which will follow both the conferences on Distribution and Production.

There is a more or less popular feeling that the subjects and problems of production and factory management have been sadly subordinated in planning the programs for our conventions, that the associations in the candy industry are for the benefit of the sales managers and chief executives and not for factory superintendents and purchasing agents! The Walter Belcher administration of N. C. A. ushers in a new epoch in this regard; the practical men of the candy industry, we understand, are urged to come to the Boston convention and take an active part in the discussions. Furthermore, since the exposition of confectioners' suppplies and equipment is now being held under the auspices of the National Confectioners' Association, it is the first obligation of the members to extend the exhibitors in the supply field the courtesy of a visit by their executives or department heads who either influence or control the purchases of supplies and equipment.

One of the main purposes of an Exposition is to afford an opportunity for the executives of both the buyer and supplier to meet under conditions where much ground can be covered in a short time. Policies and problems in connection with supplies can be discussed and exhibits of samples in larger variety can be seen and considered and thus a foundation for business relations can be made which are more satisfactory to both sides than from the contacts which are made with salesmen alone, as a rule. Furthermore, the opportunity of meeting with the executives of the supply field outside the high tension of "Buying Hours" is conducive to a better understanding and helps make the business relationship with the allied manufacturers and importers more pleasant and profitable.

Sources of Information for the Foremen Group in the Industrial Plant

The last of a series of twelve articles on Foremanship

by J. K. Novins

IN ADDITION to texts and program outlines the foremen group in the industrial plant must also have access to certain technical information applying especially to the needs of the respective industry. More often this information is needed by the group leader in planning and conducting the group studies. This information is scattered, and in this article we will, therefore, enumerate some of the principle sources.

First of all, the group leader ought to consider the experiences of plants in the same industry, but a lot of information can be secured from plants in other industries. Pioneers in the field of foreman training are such firms as the General Electric Company, the Western Electric Company, the Dennison Manufacturing Company, the Goodyear Tire Company, the Packard Motor Car Company, the Dodge Manufacturing Company, the Westinghouse Lamp Company, Mergenthaler Linotype Company, Montgomery Ward Company, Hoover Suction Sweeper Company, and several thousand other large and small plants. The Dodge Engineering Company has introduced the training in two plants. The Swift & Co., packing house, has introduced it in its 28 plants. The United States Rubber Company has introduced foreman courses in many of its factories. The Sturtevant Company inaugurated foreman training in its Boston plant several years ago. Commenting on the success of the program, an official of the company wrote:

"With our meeting this week we are bringing to a close the three months' course in modern production methods. I think I am safe in saying that practically every one of the 90 men we have had enrolled is sorry to close this pleasant chapter in the year's work.

"I knew we had an intelligent, loyal crowd of foremen, but I was scarcely prepared to see them take so enthusiastically to a course of study. I believe their enthusiasm for the course has been due to the fact that they found it full of real meat, and that it was prepared and conducted by practical men who were able to help them solve a good many of the perplexing problems arising in their daily work. Our group has been down to brass tacks all the way and there is scarcely a member who does not feel better qualified to handle his job as a result of the instruction and suggestions received.

"I realize it is difficult to get factory men to study in an effort to broaden themselves beyond the limited knowledge gained from their daily experience in the shop. This course, however, has engaged the interest of our men throughout, and I believe any group of American foremen will follow it through enthusiastically.

"As for the results accomplished, they are apparent to me on every hand. Our men take a keener interest in their work; they are more amenable to suggestions of improved methods for their departments and themselves more productive."

268 Research Agencies

Excellent sources of information for the group leader in the industrial plant consist of the various federal, state, municipal and private personnel research agencies which gather and disseminate information regarding education, placement of workers, industrial relations, vocational guidance, working conditions, industrial hygiene and safety,and other special problems in the manufacturing plant. The Bureau of Labor statistics of the U. S. Department of Labor has listed the names and addresses and activities of 268 federal, state, municipal and private agencies in a bulletin of some 200 pages. fully indexed as to subjects investigated and publications pertaining to various industries. A copy of this bulletin, entitled, "Personnel Research Agencies," can be secured from the government printing office upon payment of 25 cents. It ought to prove of great value to the

group leader as well as to the plant executive desiring to make a special study of phases of plant management. If the plant library is used in connection with the course, there are many bulletins listed which can advantageously be added to the files.

Federal Agencies

The U. S. Department of Labor Bureau of Labor Statistics has published several local surveys of plant training, which are available in pamphlet form. The U. S. Bureau of Education has published a bulletin, entitled, "Progress in the Preparation of Industrial Teachers." This bulletin contains samples of good teaching in industrial plants. The Federal Board for Vocational Education has published a number of bulletins on industrial training with special reference to particular industries. However, the most comprehensive publication on the subject is entitled, "Foreman Training Courses." It consists of two parts, printed separately, and is available to the general public. The material in Part I touches the following phases of foreman training:

Foreman training and the vocational education act.

Suggestive schedules for 82 foreman meetings.

The need of foreman training—some past difficulties.

Planning and initiation of foreman training courses.

Conducting foreman training courses.

The second part presents suggestive instruction material.

The board has also published a bulletin, entitled, "*Instructor Training,* instructor-training courses for trade teachers and for foreman having an instructional responsibility." This bulletin ought to be of special value in connection with a talk to the foremen on their duties as teachers of workmen.

Much of the necessary educational material is available in reports of proceedings published by private research organizations. The Society of Industrial Engineers, Chicago, Ill., discussed this subject at several conventions, and the information is incorporated in the proceedings covering, "*Industrial Education,* including education of the professional industrial engineer, *Training the Working Force,* education of the citizen in industry." Another excellent source is the National Society for Vocational Education, with offices in New York City, which publishes bulletins regularly, as well as a monthly periodical, *The Vocational Education Magazine.* One section in this periodical is devoted exclusively to foreman training, and contains articles contributed by employment managers and group leaders.

Safety in the Plant

Safety devices and methods of eliminating accidents in the manufacturing plant and in the handling of machinery are covered in reports published by several private research organizations, federal and state departments of labor, and by insurance companies. Thus, the American Society of Mechanical Engineers has been engaged in the development of safety codes. It is joint sponsor for the safety code for mechanical transmission of power prepared under the auspices of the American Engineering Standards Committee.

The National Machine Tool Builders' Association of Cincinnati, Ohio, is also joint sponsor for the safety code on power drive of machine tools which was prepared under the auspices and rules of procedure of the American Engineering Standards Committee.

The Bureau of Labor Statistics of the U. S. Department of Labor has published a bulletin on "Accident and Accident Prevention in Machine Building," as well as bulletins on accident prevention in various industries. The Pennsylvania Department of Labor and Industry has published safety standards on power transmission, machine tools, fire prevention and plant railways.

Such insurance companies as the American Mutual Liability Insurance, Travelers' Insurance Company and the Prudential Insurance Company have done notable work in the field of accident prevention in industry. Their engineering and inspection divisions make recommendations in safety and accident prevention for all such risks as are insured by the companies under compensation and liability policies.

Information can be secured from the National Safety Council, the American Society of Safety Engineers, Bureau of Safety, Conference Board on Safety and Sanitation, International Association of Industrial Boards and Commissions, and the Safety Institute of America.

Information for the Group Leader

The foreman-conference leader will discover a wealth of information on organization and conducting foreman groups in the researches and publications of the various research agencies and vocational bureaus maintained by colleges and state departments of labor. The Bureau of Industrial Research, New York, has published matter relating to the evolution of industrial training in America and in foreign countries. The Bureau of Educational Research of the Carnegie Institute of Technology has

(*Continued on page* 40)

Trading in Sugar Futures

A Simple Discussion of the Sugar Futures Exchange, and How it Operates. The Next Issue Will Conclude This Series with a Discussion on "Using Sugar Futures to Fix Costs."

by A. Adams Lund

THE further we progress from the crude beginnings of our craft, and the more complicated the commercial structure toward which we are building, the more vitally important becomes the element of time. There was a day when the candy maker bought a bag of sugar one day, cooked it up the next, and sold it to his customers within forty-eight hours of his original investment. But that day has gone forever. To him, the cost of sugar six months hence held no great significance. Besides, had he not read somewhere "sufficient unto the day is the evil thereof?"

We are in the midst of an era of big business, of organized buying and organized selling, of unparalleled competition for world sources of supply. If we would survive it to share in its ultimate benefits, we must insure ourselves an uninterrupted supply of the materials needed to carry on, we must predicate the future selling prices of our finished goods upon the probable future costs of the crude materials needed for their manufacture, and in the event that the market moves contrary to our previous judgment, we ought always to be in a position to undo our action with a minimum of loss. This process of protecting one's self against the uncertainties of the future market calls for some special machinery to offset the element of time which it involves. "Futures" are the machinery which modern commerce has provided to offset time.

In the Glossary which accompanies this article, you will find futures defined as *contracts* for the purchase or sale of raw sugars whose delivery will not be required until some stipulated future month. They are differentiated from actual or spot sugars, upon which delivery must be made at once. Futures contracts are also referred to as options, although there is nothing at all optional about them. The latter word is not intended to signify that the purchaser of a future contract has the refusal of the delivery which is tendered to him, but that he may (in effect) cancel his agreement by reselling on the Exchange.

The question naturally arises, why cannot purchases for future delivery be made through the ordinary channels without employing the more or less expensive facilities of an exchange? Because the producers, the growers and holders of raw sugar are unwilling to sell their output for spread shipment at the unfavorable prices which ordinarily prevail at the outset of the crop. In the futures market, this gap is bridged by operators and speculators, or it may be the producers themselves, who pledge themselves to deliver during specified months, quantities of raw sugar which they may or may not now possess, but which, if they do not now possess them, they feel confident of their ability to acquire in time to fulfill their part of the bargain. The immense value of this procedure to large users of sugar will at once become apparent. The sellers have, in effect, assumed the risk of guaranteeing the future price of any given month.

MR. LUND is in charge of purchasing with one of the foremost manufacturing establishments in the confectionery industry. His previous articles have covered various phases of the subject of purchasing raw materials, for instance: Foreign and Domestic Package Weights, Customs of the Raw Material Trades, Uninsurable Losses (Shrinkage, Absorption, Leakage, Pilferage, etc.), Desk Tests for Raw Materials, Fluctuations in the Prices of Raw Materials and their effect on the Candy Industry.

What other subjects would you suggest for this department? Have you preserved these articles for future reference? If not, would you suggest that we reprint them in book form?—Editor.

FORM OF CONTRACT FOR THE FUTURE DELIVERY OF RAW SUGAR

Contract 1—Raw Sugar

Office of.....

New York.....

Sold for.....

To .....

50 tons of 2,240 lbs. each of sugar in bags, deliverable from licensed warehouse in the port of New York, between the first and last days of....., inclusive. The delivery within such time to be at seller's option upon seven, eight or nine days' notice to the buyer. The sugar to be of any grade or grades as specified in section 88a at the price of.....cents per lb. in bond, net cash for Cuba Centrifugal 96 degrees average polarization outturn with additions or deductions for other grades according to the rates of New York Coffee and Sugar Exchange, Inc., existing on the afternoon of the day previous to the date of the notice of delivery.

Either party to have the right to call for margins as the variations of the market for like deliveries may warrant, which margins shall be kept good. This contract is made in view of and in full accordance with the By-laws, Rules and Conditions established by New York Coffee and Sugar Exchange, Inc.

....., Brokers.

(The following is written across the face:)

For and in consideration of one dollar to.....in hand paid, receipt whereof is hereby acknowledged: ..... accept this contract with all its stipulations and conditions.

(Figure No. 1)

The Exchange

The New York Coffee and Sugar Exchange is the market place where buyers and sellers of future raw sugars come together to do business. It was founded in 1882 for the purpose of trading between members in coffee futures. Sugar was not added to its activities until 1914. In 1885 the Exchange was incorporated. Membership is limited to 350, seats being bought and sold in a manner similar to that followed on other exchanges. It occupied the original site on the corner of Beaver and South William Streets, New York City, until 1902, at which time it was moved across the square to its present location, 115 Pearl Street.

Prior to 1912, the sugar market was ruled by the iron hand of the notorious Havemeyer Sugar Trust, and anything which tended to impair their monopoly was promptly legislated or forced out of existence. Consequently, it was not until December 16th, 1914, that sufficient control had been wrested from the then-dissolved combine to permit public trading in raw sugar futures on the floor of the Exchange.

Functions of the Exchange

The functions of the Exchange are summed up very clearly in the following paragraphs from "Modern Methods of Marketing Cuban Raw Sugar":

"The Exchange provides a concentration point, where, under any market conditions, sugar may be bought or sold *at a price*.

"What that price is, is determined by how much sugar is for sale and how many people want it. If the supply is large and buyers are few, the price will be low. If sugar is scarce and buyers are numerous, the price will be high. Or, to put it another way, when there are more sellers than buyers, the market declines; when more buyers than sellers, it advances. If the supply and the number of buyers are normally balanced, the price will be determined largely by the cost of production and transportation. If events or circumstances increase or curtail either the sugar supply or the number of buyers, and such events or circumstances follow one after the other alternately, the price will fluctuate.

"These are the results of well-known economic laws.

"The fact that the Exchange always provides a buyer and a seller, *at a price*, tends toward keeping business fluid. Manufacturers are able to protect their future requirements for materials. . . . Producers more readily find a market

for their crops. Crop financing is made easier for producers because bankers are more willing to loan on crops sold in advance—an operation made possible by the Exchange. Instead of taking whatever prices they can obtain during the period of heaviest production, producers are enabled to determine their selling prices at other times under favorable market conditions.

"The Exchange operates to take the gamble out of the sugar business. It helps to put and maintain business on a sound basis. That some people who have no real interest in the commodity use the Exchange speculatively, does not alter this fact. In providing machinery by which speculative risks . . . may be minimized, the Exchange helps to stabilize business and to remove a large part of the destructive uncertainty with which you would otherwise have to contend."

Not only does the Exchange stabilize business by removing the element of uncertainty, but by forecasting and discounting months ahead the approaching conditions in the raw and refined markets, it effectively prevents the sudden and violent changes to which the spot market would otherwise be subjected.

The Trading Room

The Exchange Trading room and adjacent offices occupy the second floor of the old six-story graystone building on Pearl Street. The room itself is two stories high, and in size a rectangle about 120 feet fronting the square by 80 feet deep. At the rear are the executive offices. Large blackboards showing sales, world crops, etc., surround the room on the three closed sides. At each end of the room is a raised platform and brass rail surrounding a ring about 14 or 15 feet in diameter. One is the sugar ring; the other, coffee. Actual trading in each commodity is confined within its ring.

The Call

The sugar market opens daily at 10:45 a. m., Saturdays and legal holidays excepted, and closes promptly at 3 p. m. The hours on Saturdays are from 10:15 a. m. to 12 m. Business on the floor is transacted by floor brokers who are employed by the Exchange members and receive a commission of $1.50 to $1.75 per contract, according to whether the price of the sugar is under or over 4 cents. These men watch the market constantly and execute all orders, including stop-limits, immediately they become operative.

At the commencement of the trading day, an official of the Exchange conducts the "opening call." Beginning with the nearest trading month, each month is called in succession and the opening trading in that month is begun. When it is evident that there is no more trading to be done in that month, the next month is called and the process repeated until the limit, thirteen months distant, has been reached. What is transmitted to you as the official opening quotation is not the price at which the first sale of the day was consummated, but the last bid price of the month which was recorded during the opening trading. In active or excited markets, where the floor brokers have in hand at the opening a large volume of market orders, especially stop-loss orders which have suddenly become effective through a turn in the market, the month's opening trading may continue for several minutes, accompanied by correspondingly violent fluctuations in price. These fluctuations give rise to what is termed the opening range, as distinct from the opening quotation, at which sugars may or may not actually have been sold.

Following the completion of the opening call, all months are traded in without interruption until the close. The brokers usually consummate the trades among themselves and then publicly announce the sale in the ring. Through experience it has been found that the bulk of the trading is done in certain months, known as active months, and while occasionally a sale may be made in an inactive month, the lack of demand for sugars in these positions makes the procedure difficult if not actually dangerous. The active months are March, May, July, September and December, with January and October moderately traded in.

Sales in the ring are chalked on the board as soon as they are announced, along with other pertinent reports concerning world crops, centrals grinding, weather conditions at primary points, etc.

Should the market fluctuate more than 100 points, or 1 cent per pound, up or down from the previous day's close, trading is automatically suspended until the following day or until such time as it becomes possible for the market to return within these limits. The purpose of this ruling is to prevent abnormal fluctuations and their inevitable speculative effects.

Rings and Margins

Twice during the day, at 11:30 a. m. and 1 p. m., trading is momentarily suspended and a committee, appointed by the Exchange, arrives at a fair price for each month, based upon the prevailing bid and asked prices. These prices are transmitted to the clearing house, who immediately go over the accounts of their members to see that the amount of margin which they have put up is sufficient to cover their outstanding contracts. If the variations in price are in excess of the margins deposited with them, a call is made for additional margin, which call must be satisfied within one hour

RAW SUGAR IN BOND

THE COFFEE EXCHANGE OF THE CITY OF NEW YORK — No. — Transferable Notice

The Coffee Exchange of the City of New York

TRANSFERABLE NOTICE

NEW YORK, ... 19....

.....A. M. o'clock.

To.....

Take notice that on..... we shall deliver to you 50 tons of 2,240 pounds each, in bags of.....Sugar, in accordance with the terms of contract sale to you, dated ..... at .....cts. per pound. We pledge ourselves to deliver sampling order to the last holder of this notice upon presentation of the same to us. We further pledge ourselves to deliver on the....., between the hours of.....and....., to the last acceptor of this notice, the negotiable warehouse receipt and withdrawal entry or entries for the Sugar, against payment for the said Sugar, at the rate of.....per pound and allowance, if any, of excess duty established as between the original entry weight and the delivery weight.

(NAME OF EXCHANGE BROKER).

Per.....

CONDITIONS

In consideration of one (1) dollar paid to each of the acceptors, receipt of which is hereby acknowledged, it is agreed that the last acceptor hereof will, between the hours of.....and.....o'clock, on the day preceding the ....., present the within notice to the issuer thereof, and, on the following day, between the hours of.....and....., receive the negotiable warehouse receipt and duly executed withdrawal entry or entries, and pay for the Sugar at the rate of .....per lb. basis Cuba Centrifugal 96 degrees average polarization outturn, with additions or deductions for other grades, according to the rate of THE COFFEE EXCHANGE OF THE CITY OF NEW YORK existing on the afternoon of the day previous to the date of this notice. It is further agreed that each acceptor hereof shall continue his (or their) liability to each other for the fulfillment of the contract until this notice shall have been returned to the issuer thereof, and a sampling order specifying the Sugar to be delivered received by the last acceptor hereof from the said issuer and a negotiable warehouse receipt and withdrawal entry or entries shall have been delivered, at which time all responsibilities of intermediate parties shall cease.

Per.....

Time Received	Contract Date	The above, with all its conditions and obligations, is hereby accepted.	Transferred To

(THIS IS A FAC-SIMILE COPY OF THE FORMAL NOTICE OF DELIVERY ISSUED BY THE CLEARING HOUSE BROKER TO HOLDERS OF LONG ACCOUNT. UPON RECEIPT OF THIS NOTICE, THE CUSTOMER MUST EITHER SELL OUT IMMEDIATELY OR ACCEPT THE DELIVERY WHICH HAS BEEN TENDERED TO HIM. THE NOTICE USUALLY PASSES THROUGH A NUMBER OF HANDS BEFORE IT FINALLY REACHES A PARTY WHO IS WILLING TO TAKE PHYSICAL DELIVERY OF THE SUGAR.)

Figure No. 4

after the demand has been made. The term "rings" is for the quoting of prices; "margin" is the request for margin based on rings.

Disputes arising between traders, as when there is a preponderance of either buying or selling orders, necessitating some sort of an apportionment, are arbitrarily decided by the official conducting the call, without recourse to any higher authority.

The Close

A gong is heard one minute before the close of the market. Business transacted during this last minute of trading is considered to have been done at the close. At the conclusion of trading, the floor brokers give up the names of the principals for whom they have been trading. These principals are understood to be the member houses through whom the trading has been done, and not the actual buyers and sellers of raw sugars.

The Contract

Each contract bought or sold on the Exchange calls for the delivery of 50 tons of raw sugar, or multiples thereof, in bond, in licensed warehouses at New York. (See figure No. 1.) Thus, 10 contracts for May sugar would represent 500 tons of raw sugar to be delivered during the subsequent month of May.

Clearing the Contract

These contracts are "cleared," that is, differences of account between members are settled, etc., through the agency of the Coffee and Sugar Clearing Association, known also as the clearing house, working in conjunction with the Exchange. The clearing house charges its members for its services in clearing their contracts, at the actual cost of about 8 cents per contract.

RAW SUGAR

New York, _____ 192....

BUYER,

SELLER, _____

Subject to the Rules and By-Laws of the New York Coffee & Sugar Exchange, Inc.

No. Tons Sugar Basis Cuban Centrifugal 96 Degrees in Bond	DELIVERY IN	PRICE
(These slips,— black for purchases, red for sales,— are exchanged between the members of the Clearing House in the consummation of trades. The Clearing House is kept informed of these trades throughout the day.)		

(NAME OF C.H. BROKER)

_____ ATTY.

Fig. 2

NEW YORK

_____ 1925

(NAME OF CUSTOMER)

_____

In accordance with your instructions we have this day made the following transactions in RAW SUGAR for your account and risk, subject in all respects, and in accordance with, the Rules, By-Laws, Regulations and Customs of THE NEW YORK COFFEE AND SUGAR EXCHANGE, Inc.

All transactions made by us for your account contemplate the actual receipt and delivery of the SUGAR and payment thereof.

The right is reserved to close transactions when margins are exhausted or nearly so, without giving further notice.

BOUGHT			SOLD		
Tons	Month	Price	Tons Raw Sugar	Month	Price
	(This is the usual form of confirmation mailed out to the customer by the broker executing the order.)				

(NAME OF ISSUING BROKER).

Fig. 3

Each member is required to report to the clearing house before 5 o'clock each day, the sales and purchases which it has made during the day. (See figure 2 and figure 3.) From these advices the association is enabled to check all trades between its members and to see that the books of those members agree one with the other, as to the details of all transactions which have taken place between them. Thus, the clearing house not only carries on its books a record of all trades which have taken place between its members, but holds each individual member responsible to it for its own transactions. Each member is required to put up with the association, in cash, an original margin of $250 per contract to cover its net position in the market of so many contracts long or short, and this margin is, in turn, exacted from the customer. For instance, if the clearing house member has on its books at the close of the day 60 contracts long and 40 contracts short, it is only required to margin with the clearing house its net interest in the market amounting to 20 lots, whereas it may receive from its customers an original margin of $250 for every one of the 100 lots bought or sold for their various accounts. This will explain why margin can occasionally be waived in the case of sound customers with unimpaired credit ratings.

As the market fluctuates, calls may be made for subsequent or "variation margins," based either on rings or on closing bid prices. Con-

tracts are closed out in one or two ways: (1) by reselling on the Exchange, or (2) by accepting physical delivery of the sugar when tendered. As a general rule, the bulk of all outstanding contracts is liquidated on or before the "first notice day," after which trading in the spot month becomes difficult, if not exceedingly hazardous.

Delivery Through the Exchange

It is a matter of common knowledge that less than 1 per cent of all the sugars traded in on the Exchange for future delivery is actually delivered through the Exchange. The rules of the Exchange permit the seller of sugar futures to buy back his futures contract and thereby be in a position to sell his actual raws in the spot or open market; the same applies to the buyer of a futures contract who may sell out his option and purchase his actual needs in the open market. And since it costs the seller about 16 points to make a delivery and the buyer about 14 points to accept his tender through the fool-proof and consequently complicated channels of the Exchange, unless one or the other party to the transaction feels that he can derive some compensating pecuniary advantage from forcing the other to accept or to make a delivery, it is obvious that the contract will be closed out and the actual sugar turned over through the ordinary "cost and freight" channels.

Notices of Delivery

As the months roll around during which deliveries are scheduled, sellers who desire to tender delivery through the Exchange issue to the clearing house as many warehouse receipts as they have contracts to deliver. Each receipt covers 50 tons or approximately 350 bags of Cuban raw sugar (7 bags of 320 pounds each being equal to 1 long ton), or an equivalent quantity of such other sugars as are permitted in the contract. A 10 per cent tolerance is allowed, either way. Upon receipt of these receipts, or notices, the clearing house goes over its books and apportions them among its members according to the number of long or "bought" contracts which they are holding. The clearing house member is immediately notified of the number of contracts which have been allotted to him and the merry game of "pass the notice" begins. As the notices must be taken care of at the call of the day on which they are issued, time is the essence. (See figure 4.)

The clearing house broker in his turn distributes the notices among his customers as he sees fit and buyers who have not anticipated this procedure by closing out before the first notice day must be prepared to take up and pay for the tenders as they are presented, or sell out at the best price possible within twenty minutes of the time they receive the notice, provided, of course, that they do not wish to take delivery. If the recipient of a notice sells out, he marks in the appropriate columns the time he received the notice and the name of the party to whom he is transferring it. The notice continues to circulate during exchange hours until a purchaser is found who is willing to accept delivery, every transfer being effected within twenty minutes of receipt. Anyone who fails to forward the notice within this period is liable to have it returned to him by 4 p. m. of that day.

The party accepting the tender notifies the clearing house broker that he has done so and the broker "stops" the notice. Tenders for delivery can be issued at the seller's option, five, six or seven days prior to the first of the month in which the delivery is due. In other words, on a tender for delivery against a May contract, the first notice day would be April 24th; the second, the 25th, and the last notice day, the 26th. The last regular delivery day is the corresponding fifth, sixth or seventh day prior to the last day of the month in which the delivery is due. Hence, the seller has the privilege of delivering his sugars any time during the month up to the 24th, whereas the buyer cannot demand delivery until the 24th. Should the seller fail to make delivery by the 24th of the month in which he has sold, he is penalized 25 points above the closing price of the Exchange, in default of delivery.

All business on the Exchange is based on raw sugars of 96 degrees average polarization outturn, with allowances for centrifugals above and below 96 degrees, and grading not lower than 92 degrees. The test of the sugar tendered is established by three chemists representing respectively, the buyer, seller and the Exchange. The average of these analyses is employed.

The concluding article of this series presupposes a knowledge of the subject treated in the present issue. It will embark directly upon a practical or laboratory discussion of the methods by which manufacturers may use the futures Exchange to pre-determine costs. Preserve this copy for later reference.

Sugar Trade Glossary

Definitions and Explanations of Words and Phrases Used by the Sugar Trade

TO the inexperienced trader, unfamiliar words and phrases constitute about 99 per cent of the mystery which surrounds the actual and futures sugar markets. In the ordinary course of barter, there has developed a sort of trade jargon consisting of brokers' slang, words and phrases having technical significance on the stock and commodity exchanges, and in not a few instances, terms peculiar alone to the sugar market.

What the newcomer needs, therefore, in order to understand the various processes involved in dealing in these sugar markets, is a concise dictionary of definitions. Following are the definitions of a selected list of the more common words and phrases used by the sugar trade.

(*Continued from February issue*)

Equity.—Extent of a customer's rights in a contract carried on margin; the amount by which the current value of a contract exceeds the original cost plus commissions; the sum which may be borrowed against by the customer.

Estimate.—(As used in sugar statistics), a rating or approximation of crop outturn, consumption, etc., especially from incomplete data.

Exchange.—The market place where buyers and sellers of future raw sugars (or their representatives) meet to do business; specifically, The New York Coffee and Sugar Exchange, Inc.

Execution.—The consummation of an order through the channels of the Exchange.

Firm at List Prices.—It has been customary for refiners to break high ground gradually by continuing to accept orders from their customers at old list prices for a short period after the announcement of an advance. The termination of this policy is referred to as "going firm at list."

Firm Bid.—An option which the buyer offers to the seller of raw or refined sugar, permitting the latter a stipulated period within which to accept or decline the bid.

First Notice Day.—The seventh day preceding the first of the month in which the delivery on a future contract is due. The first of three days during which the seller is permitted to serve notice of his intention to deliver actual sugars through the Exchange.

Floating Interest.—A variable or neutral interest in the market, a position in which the trader is able to jump quickly from long to short side, or vice versa, depending upon which way the market turns.

Floor Broker.—A broker employed by a member house of the Exchange to transact its business on the floor of the Exchange. It is the duty of the floor broker to watch the market continually for his client, executing on the floor all orders including stop-limits.

Floor Brokerage.—Floor brokers receive a fee of $1.50 per contract if the price of the sugar is under 4c; $1.75 if the price is over 4c.

Fluctuation, Limit of.—A maximum variation of 100 points up or down from the previous close, permitted by the rules of the Exchange during any one day of trading. At this point the Exchange appoints a committee to handle any business which can be done at the limit price. If at any time during the day it becomes possible for the Exchange to return within the limit, ring trading is resumed; otherwise active trading is suspended until the following day.

F. O. B. Sugars.—Raw sugars quoted on the basis of free-on-board the vessel at the shipping port of the country of origin; usually taken to mean Cuban sugars whose price includes all charges up to the time of shipment, as opposed to C. & F. sugars which include, in addition, the ocean freight to the port of discharge.

Free Sugars.—Sugars admitted to the U. S. free of duty; specifically those produced in Hawaii, Porto Rico, Philippine Islands, and Virgin Islands (St. Croix).

Full Duty Sugars.—Foreign sugars on which the full payment of duty is required upon admittance to the U. S. This classification includes all imported sugars which are not on either the free or preferential lists, which see. The present duty on these sugars is 2.206 cents per pound.

Futures.—Contracts for the purchase or sale of raw sugars, delivery upon which will not actually be required until some stipulated future month.

Futures Market.—The place where buyers and sellers of future raw sugars, or their representatives, meet to do business: The New York Coffee and Sugar Exchange, Inc.

Grades.—Classes of sugar of the same relative quality, varying according to slight differences in size or perfectness of crystal, lightness of color,

alkalinity, freedom from impurities such as molasses, etc.

Grinding.—The first step in the process of extracting raw sugar from the cane.

G. T. C.—(Good until cancelled.) An order given to the broker with the express understanding that it is to remain operative until canceled by subsequent advice from his principal. Orders given without this stipulation become automatically canceled if they remain unexecuted at the close of the day of trading.

Guarantee.—An agreement made by the refiner to protect his customer against some contingency which may arise during the life of the contract; usually a decline in price.

Hard Sugars.—Sugars completely refined. (The so-called "damp" or Confectioners' A sugars are included under this head.)

Hedges.—Dealings on the Exchange against purchases and sales of actual merchandise, or against stock in hand, or on differences between several months, or several markets. (See ARBITRAGE.)

Hedge-Selling.—The selling on the Exchange, by producers, as a hedge against future production.

Hedging.—Reversing or undoing a previous transaction through the medium of the Exchange, in order to minimize a loss or insure a profit.

Hedging Out.—Closing out a hedge transaction through the Exchange by means of a counterbalancing purchase or sale.

High.—The top price at which sugar is sold during a specified period of a day, week, month, or year, or on any swing of the market.

Honeycombed Market.—A market suffering from an accumulation of stop-loss orders. This condition frequently obtains after a sustained advance or decline, and in the event of a sudden turn in the market, may precipitate a violent and dangerous movement through great numbers of them becoming operative simultaneously.

Hours for Trading.—(In raw sugar futures.) From 10:45 A. M. to 3:00 P. M. on week-days, except Saturdays; and from 10:15 A. M. to 12:00 M. on Saturdays; legal holidays excepted.

Immediate Shipment.—Understood by refiners and in the trade generally, to mean "shipment within three days."

In Bond.—Remaining in the custody of the government pending payment of import duty.

Invert Sugar.—A mixture of levulose and dextrose produced by the hydrolysis of sucrose (cane or beet sugar).

Invisibles.—Accumulations of refined stock in consuming channels, the estimates of which do not appear in the regular statistics.

Judgment Order.—See DISCRETIONARY ORDER.

Last Delivery Day.—The last day for the regular delivery of raw sugars through the Exchange becomes the fifth, sixth, or seventh day prior to the last day of the month in which the contract calls for delivery, depending upon whether the seller chooses the fifth, sixth or seventh day prior to the first of that month on which to serve notice of his intention to deliver.

Last Notice Day.—The fifth day preceding the first of the month in which the delivery on a future contract is due. The last of three days during which the seller is permitted to serve notice on the buyer of his intention to deliver actual sugars through the Exchange against a future contract.

Liquidation.—The closing out of open futures contracts. The settling of accounts. The closing out of contracts due to insufficient margin is referred to as "forced liquidation."

Limited Assortment—In refiners' contracts, the buyer's choice of grades is restricted to certain brands specified by the refiner. See FULL ASSORTMENT.

List.—The published schedule of a refiner's prices; also the basis price upon which the various grade differentials are based.

Loading.—Taking on cargo; "February loading" signifies that the sugar is to be taken on board the vessel at the foreign out-port during the subsequent month of February, and at any time during the month at the seller's option. It does not mean that the sugar is guaranteed to "clear" at the specified time.

Long.—Having a supply of stocks; prepared for or depending for a profit upon an advance in prices.

Louisiana Second Sugars.—Louisiana sugars corresponding to refiners' "softs," obtained in the manufacture of "plantation granulated." Embraces all Clarifieds, Yellow and White.

Low.—The lowest price at which sugar is sold during a specified period of a day, week, month or year, or on any swing of the market.

Margin Call.—Demand for additional margin based on changes in the market. (See VARIATION MARGIN.)

Margin Prices.—The prices on which margins are based, usually the closing prices. (See also RINGS AND MARGINS.)

Margin, Refining.—See REFINING MARGIN.

Margin Requirements.—See ORIGINAL MARGIN and VARIATION MARGIN.

Market Orders.—Orders operative on the Exchange; orders to buy or sell at the best possible price.

Melting.—The first step in the process of refining raw sugar.

Meltings.—(In sugar statistics.) Meltings comprise all raw sugars in process of refining or direct consumption, as such.

Mother Liquor.—The syrup from which the refined sugar has been crystallized.

Nearby Market.—The market for actual raw sugars which are due to arrive in New York within seven days.

Nearbys.—Actual raw sugars in nearby positions: Nearby C. & F.'s are cost-and-freight sugars scheduled to arrive in the port of New York within seven days, at which time they automatically become spot sugars. Nearby actual sugars should not be confused with nearby positions on the futures Exchange since the latter do not represent the physical merchandise but merely **contracts** for that merchandise, to be delivered through certain specific channels, namely, those of the Exchange.

Net Rendement.—See RENDEMENT.

Net Weight.—All raw sugars are sold on the basis of actual net weight; the net weight of bags on Cuban centrifugals is 320 lbs. The net weight of tenders for delivery against future contracts holds good for ten days for re-delivery, after once being properly established in accordance with the rules of the exchange.

No Blue Grades.—A throw-back to the early days of sugar refining when bluing was resorted to in order to whiten sugar. This method is rarely employed at present, but the term "no blue" fine granulated, etc., is still used to designate certain brands of white sugars.

Notices of Delivery.—See TENDERS.

Offerings.—Actual raw sugars offered for sale in the spot or nearby market.

On Stop.—A purchase or sale of sugars on the futures Exchange, which is protected by the automatic operation of a stop-loss order when the market reaches a given point, is said to be "on stop."

Open Contract.—A contract for the sale or purchase of future sugars which has not been satisfied or closed out by a counter-balancing purchase or sale.

Opening Call.—The call which is conducted by an official of the Exchange at the commencement of trading each day. The months (or positions) are "called" one after another and traded in until all opening orders in the brokers' hands have been executed.

Opening Orders.—All orders, including market orders, which are to be executed within the given range of the opening.

Opening Quotation.—The **last price bid** during the opening trading is referred to as the "official opening quotation" and is used in determining margin prices. This quotation does not accurately reflect the market, however, since it is a figure at which sugars may or may not have been sold.

Opening Range.—The presence at the opening of a large volume of buying or selling orders causes fluctuations at the call which in some instances may amount to 5 or 10 points or even more. The high and low at which any month is traded in at the opening is known as the opening range.

Open Market.—The market where actual or spot sugars are sold, as opposed to the futures market.

Operator.—One who operates or deals in sugars; one who buys and sells on the Exchange against commitments of actual sugars.

Option.—The right to deliver against or demand delivery upon a contract for raw sugar on the futures Exchange. The term is taken to mean that a buyer who does not wish to take delivery of his purchase may avail himself of the facilities of the Exchange to resell it. Literally, an agreement whereby a person who is desirous of purchasing sugar, contingent upon future events, assures to himself its availability at a given price for a stipulated period; a future contract.

Original Cost.—(Of Exchange contracts). The purchase price plus brokerage; the original cost of actual sugars will also include the cost of taking delivery.

Original Margin.—A cash deposit, varying with market conditions, which is required of its members by the Clearing House as collateral security covering new contracts registered with them. The present requirement is $250 per contract according to the broker's net position on the market at the close of the day, of so many contracts, long or short. This deposit is in turn required of the customer to protect the broker from loss on contracts entered into for his account.

Outturn.—A yield or turning out with respect to quality, quantity or condition; also the quality, quantity or condition turned out or yielded. Usually spoken of as "crop outturn," "average polarization outturn," etc.

Penalty.—The forfeit to which a person binds himself in default of fulfilling the conditions of a contract; a fine. The penalty for failure to deliver sugars on the Exchange on open contracts is 25 points above the closing price of the Exchange on the last delivery day.

Plantation Granulated.—Domestic cane sugar, semi-refined; specifically, Louisiana sugar partially refined at the plantation.

Plant Cane.—The growth from the seed cane, planted and grown to maturity.

Point.—A unit in quoting prices; 1c per lb.; a point fluctuation on futures contracts is equivalent to $11.20 per minimum contract of 50 tons.

Polarization.—An estimation of the percentage of sugar in a sample by means of the polariscope. Because of small losses occurring while sugars are in store, polarization is required to be established at each delivery.

Position.—See SHIPPING POSITION and TRADING POSITION.

Preferential Sugars.—Sugars which are accorded a preferential duty by the U. S. Government; specifically, Cuban sugars, admitted at a 20% reduction in duty over the sugars of other countries. The present duty on Cuba 96 degree centrifugals is 1.7648 cents per lb., as against the full duty collectible on other foreign sugars, of 2.206 cents per lb.

Premium.—Excess in price commanded by distant positions on the futures Exchange over the price of spot or nearby sugars, or over nearby positions on the Exchange. This excess above the nominal value of the sugar is usually caused by the refusal of producers to sell sugars for future shipment.

Production—(In sugar statistics). The aggregate amount of cane or beet grown and manufactured into raw sugar.

Profit.—The balance in favor of the customer after a contract has been closed out and the brokerages and all other fees pertaining to the contract deducted.

Prompt Shipment.—Understood by the refiners and in the trade generally to mean shipment within 5 days. See IMMEDIATE SHIPMENT.

Purity.—Also Quotient, Coefficient, Exponent, or Degree of Purity. The percentage of pure sugar in the dry substance. Purity is not synonymous with Polarization, which is an estimation of the content of sugar in the **total** substance (moisture, etc., included).

Put.—A privilege which one party buys of another to "put," or deliver, a quantity of future raw sugar at a fixed price and date. Puts and calls are pure gambling and their use is not countenanced by the Exchange.

Pyramid.—See SCALE PLAN.

Quotation.—Quotations for future contracts on the Exchange are based upon deliveries of net weight in bonded warehouse at the Port of New York. Refiners' quotations are based on deliveries of net weight; city business, f. o. b. buyer's warehouse; out-of-town shipments, f. o. b. cars at shipping point, etc. See TERMS.

Rally.—Recovery in strength after a period of declining prices.

Range.—Spread between high and low prices during any given period or on any swing of the market. The high and low limits at which prices are quoted or business transacted during any specified period.

Ratoon, Ratoon Cane.—Second or later growths of cane from stubble, without replanting from seed.

Raws, Raw Sugar.—Sugar crystallized from the cane juice without purification.

Reaction.—A counter tendency or movement in the market contrary or opposite to the heretofore prevailing trend.

Receipts.—(In sugar statistics.) Receipts comprise all arrivals of raw sugars at any given port.

Re-Entry.—Order put in again under certain conditions, usually a difference in price. Spoken of in connection with refiners' repricing contracts.

Recover.—To retrieve losses. Usually said of an advancing market following a decline; to get better, to regain lost ground.

Re-Delivery.—Any subsequent delivery of sugars originally delivered through the Exchange against a futures contract. On re-deliveries of raw sugar within six months of the initial delivery, an allowance of 350 lbs. per contract per month is made by the seller to offset shrinkage losses while the merchandise is in store. The original weight tenders hold good for ten days.

Refined Sugar.—A highly purified sugar.

Refining Margin.—The difference between the cost of raw sugars to the refiner, duty-paid, and the price at which the sugar is sold; the cost of refining, including manufacturing profit, etc.

Refusal.—An option on raw or refined sugar permitting the buyer a stipulated time within which to accept or decline an offer.

Rendement.—Yield; the number of pounds of sugar produced per 100 pounds of cane or beets.

Repricing.—The re-entry of an undelivered balance on a refiner's contract at a decline in price; a type of price guarantee sometimes offered to buyers of refined sugars.

Ring.—The circular enclosure within which the actual Exchange trading in a given commodity is confined.

Rings and Margins.—Twice daily, trading on the floor of the Exchange is momentarily stopped while a committee appointed by the Exchange to serve for a year, arrive at prices on which the Clearing House may base their requests for margins. This procedure takes place at 11:30 A. M. and again at 1:00 P. M., at which hours the then-prevailing bid prices are posted.

Run.—The series of operations which constitute the refining process; liquors which have not been subjected to further courses in refining are known as first run liquors.

Scale Plan.—Pyramiding; buying or selling with surplus margin or an accumulation of profit resulting from an advance or decline in the market. Buying or selling further quantities without putting up additional margin.

Seaboard Basis.—An arbitrary basis of quoting prices employed by the domestic beet sugar refiners regardless of their location or distance inland. Quotations on this basis are figured upon the cost of the sugar at the Atlantic seaboard plus freight to the buyer's market.

Second Hands.—Sellers other than the original seller. Also refined sugars offered for sale by jobbers or persons other than the refiners.

Sell Out.—To sell or close out a bought contract on the Exchange, thus completing the transaction

Shade.—To lessen slightly, as to shade the price.

Shipping Position.—Estimated date of loading or clearance of sugars sold for shipment to the refiners; also, the estimated date by which the refiner will be in a position to make deliveries against current orders.

Short.—In the condition of one who is short of what he has (nominally) sold; as, to sell short. "Shorts" are those who sell short. Persons who sell in the futures market contract to deliver within a specified time that which they may or may not now possess, but which, if they do not now possess it, they feel confident of their ability to acquire within the limited time available.

Softs, Soft Sugars.—Semi-refined sugars still containing a trace of molasses; Nos. 1 to 15.

Specifications.—The designation of withdrawal or shipping instructions on contracts for refined sugar; frequently required to accompany the order.

Spot.—On hand for immediate delivery after sale.

Spot Market.—The market for actual sugars on hand or in warehouse available for immediate delivery after sale.

Spot Month.—The current month on the futures Exchange. As the number of days remaining in the spot month become fewer, the trading in that month becomes increasingly narrow and dangerous.

Spread.—Difference in price between near and distant months on the Exchange. Also, an option in the nature of a put and a call, in which the put price differs from the call price. The employment of the latter is not countenanced by the Exchange.

Squeeze.—A concentrated effort on the part of speculators to manipulate the market by forcing the shorts to cover, based upon their inability to secure sugars to deliver, and vice versa.

Stocks.—(In sugar statistics.) Total stocks comprise all raw sugars which have arrived in port and are on hand up to the point of melting. These are further classified as Importers' Stocks and Refiners' Stocks.

Stopped Out.—Sold through the automatic operation of a stop-loss order.

Stop.—To stop the circulating of a transferable notice or tender of delivery after a buyer has signified his intention to take delivery is referred to as "stopping the notice."

Stop-Limit.—A protective order which does not become operative until a given point in the market has been reached, at which time it automatically becomes a market order subject to immediate execution at the best price possible. A stop-loss order.

Stop-Loss Order.—See STOP-LIMIT.

Straddle.—A variety of hedge. The trader assumes a position in the market both long and short. This position is known as a "straddle." The trader has the advantage of being in the market both ways with no chance of being left out in the event of a sudden change. It is only employed where the trend of the market is uncertain. If the market turns upward, he closes out his sale, and vice versa. It is also referred to as "counter-position," or going under cover.

Strong Sugar.—A sugar which resists inversion.

Stubble Cane.—See RATOON CANE.

Surplus.—See CARRY-OVER.

Switch, Switch Order.—The transfer of a contract in the futures market from one month to another by paying the prevailing difference in price. The advantage of a switch is that it enables the trader to maintain a long position and ride with the market without taking delivery.

Take Up.—To accept notice or tender of a delivery of raw sugar through the futures Exchange.

Tare.—A deduction of weight made as an allowance for the weight of bags. The actual tare allowed on purchases of raw sugar is determined by dumping 2½% of each mark of sugar, cleaning the bags and weighing them.

Tender, Tender of Delivery.—A transferable notice issued by the seller of a future contract, making known his intention to deliver actual sugars against the contract through the channels of the Exchange. The notice circulates during Exchange hours until a buyer is found who is willing to take actual delivery of the raw sugar.

Terms.—Raw sugar terms: spot, ex licensed warehouse at the port of New York; cash, 10 days from average date of delivery; interest at 5 or 6%; net weight, lighterage free to refinery. Refined sugars terms: Cash less 2%, 7 days, plus or minus current differentials for special grades and packings.

Test.—The test of sugar tendered for delivery against a future contract is established by three chemists, one appointed by the receiver, one by the deliverer, and one by the Exchange, the average of the three being employed.

Toll.—A compensation taken by refiners for refining sugar; usually $1.25 to $1.30 per 100 lbs.

Tolling Basis.—The refining of sugar on the basis of a toll.

Ton.—The long ton of 2240 lbs. is used in computing the weight of raw sugar. (7 bags of Cuban raw sugar containing 320 lbs. each, comprise 1 long ton.) The ton used in computing the weight of refined sugar is the short ton of 2000 lbs.

Trade.—A completed transaction on the futures Exchange; a purchase and a sale.

Trade In.—An exchange.

Trading Basis.—The basis of trading on the futures Exchange is the unit contract consisting of 50 tons of raw sugar, of 2240 lbs. each.

Trading Differences.—A fluctuation of one point is equivalent to $11.20 per lot of 50 tons.

Trading Month.—The month in which delivery is required in a future contract.

Trading Position.—See TRADING MONTH.

Transfer Order.—See SWITCH.

Turnover.—Volume of business transacted during a given session, or period, by the Exchange.

Variation Margin.—Additional margin called for when a contract shows depreciation; an additional deposit required by the Clearing House of its members and in turn required of the customer, to offset market changes.

Visibles.—Stocks of sugar which can be definitely estimated; those which appear in the regular statistics.

Weak Sugar.—A sugar which inverts easily by simple boiling.

White Clarifieds.—In Louisiana cane sugars, grades corresponding to the higher and whiter grades of refiners' soft sugars.

Withdrawals.—Shipping instructions withdrawing sugars against a contract; specifications.

Withdrawn.—A term used to indicate that the refiner is not a free seller of sugar.

Yellow Clarifieds.—In Louisiana cane sugars, grades corresponding to the lower and darker grades of refiners' softs.

Yield.—1. Rendement, or outturn. 2. Refining yield; the percentage of the refined product derived from the manufacture of raw sugar; 93 lbs. refined per 100 lbs. of raws.

The writer does not pretend that this is a complete dictionary of all words and phrases used in the sugar trade. But if it serves as a guide to a hitherto uncharted realm of futures trading, it will have fulfilled its mission.

Stock Manager to Factory Superintendent on Phone:

"HEY, ED! Where are those C. C. Pepps? . . . No, you didn't; you sent down wintergreen wafers . . . Not me! What's the matter, been drinking blind men's hootch, again? . . . Who did? . . . Nope. . . . Nope, not according to my records. Looks to me like mismanagement. . . . Well, what about the three-pound assorted? . . . One-pound bonbons. . . . Five-pound hard candy? Ed, you turned out to be an awful lemon. . . . What about nutmeats? . . . Yea, *maybe* . . . I'm putting in another order for five hundred M. C. Cherries. Can I get them this afternoon? . . . You have to what? You don't mean 'pick' them, do you? . . . Great Scott! here it is three weeks before Christmas and not a dog-gone thing in the house. . . . What? *Me*, anticipate? How do you suppose I know how much the customers are going to order? . . . I can't help that. Get after the purchasing department. Call up 'Joblots'. . . . No, Good Lord, I've got the place filled up with that junk already. All you do when I ask you for nougats is to send me caramels. I tell you, I don't want caramels. I've got enough caramels here to last us till June if you don't make another pound. Can't those candy-butchers of yours turn out anything else? . . . I didn't order them. . . . You mean mismanagement. . . ." (Lowering his voice), "Say, Ed, I have something to show you when you come down. . . . No, not paint remover. Baldy, up in the laboratory, says it's 'synthetic but safe'. . . . Hm-hm. . . . So I don't get the nougats until Tuesday. Might as well be New Year's. Darn poor management!"

What the Superintendent Really Said:

"I SENT them down day before yesterday. . . . Sure, I sent you both. Besides, who ordered the wintergreen wafers, anyway? . . . You sure did, and you borrowed a ten-spot from me at the same time. . . . Tell me you forget that, too! . . . You found you had plenty of fruits in stock, didn't you? . . . Why, you poor fish, you only ordered those three pounds this morning; give me time to get the ribbons on, will you? You can expect those the latter part of the week. . . . You know I can't stop to make that miserable little lot of bonbons, now. You'll have to back-order them. I'm running on them now. . . . This afternoon. . . . No 'maybe' about it. . . . Stop trying to kid me. My time's worth ten dollars an hour whether I get it or don't. . . . We'll have to pick up a few barrels of cherries, first. . . . I said 'pick up' not 'pick'. . . .

Well, if you were on your job, seems to me you'd anticipate a little bit and not leave things to the last minute. Anyway, I haven't the cherries. . . . I did call him. He says they're on a boat. How about some more caramels? . . . Why in thunder do you order them if you don't want them? . . . No, sir, we make only what you order. Efficiency, that's me! . . . Huh?" (Suddenly evinces interest and strains hearing), "Whasat? You mean that varnish remover you introduced me to last week? . . . Oh-h, all right. I forgot something, anyway, I'll be right down! . . . Hang your d——d orders, enyhoe!"

Market Extension

The Application of Cooperative Marketing to the Basic Problems Affecting the Development and Stability of the Confectionery Industry*

by Fred G. Taylor

Executive Secretary, Western Confectioners Association

THE Western Association in particular and the confectionery industry in general are very fortunate indeed in having the active services of a man of Mr. Taylor's experience and calibre in association work. He is a man of broad vision and high ideals and has a very deep and sincere appreciation of the confectionery industry, its problems and possibilities of future development.

Mr. Taylor has had a very interesting business experience which is significant in view of his convictions as expressed in this address. For seventeen years he was engaged in the manufacture of sugar from factory hand to general manager of the Amalgamated Sugar Company. He is at present at the head of the Fred G. Taylor Brokerage Co. of Ogden and San Francisco and yet is giving the best of his time and effort in behalf of the Western Confectioner's Association. His previous business relations with the manufacturing confectioners of the west earned for him many very close friendships and the fact that he was urged to serve their association in capacity of Executive Secretary in addition to the responsibilities of his own business is a tribute to Mr. Taylor's business ability and sterling character. He has a true perspective on the candy industry and is approaching the solution of its problems with the consumer's view point uppermost in mind which is convincing in itself that Mr. Taylor's thinking is constructive.

In view of his business background it is quite significant that Mr. Taylor places such great importance on the ethical standards, human relationships and co-operative effort which should exist throughout the industry. It is refreshing and inspiring to have these thoughts brought before us by a man so genuine and practical.—Editor.

BEFORE opening my subject I should like to establish a premise of common ground with you from which to proceed. I will, therefore, generalize briefly on some of the problems of the confectionery industry, as I see them.

Three Outstanding Needs

In my opinion there are three great outstanding needs in our business from the political side of the industry.

First, the application of higher standards of ethics in our business relationships with the members of our craft and the world at large.

Second, a development of our own appreciation of the character and importance of our industry. The consciousness of power to serve—"a pride of craft."

Third, the establishment of sanitary and hygienic standards and the possession of what THE MANUFACTURING CONFECTIONER has characteristically called a "A Sanitary Conscience."

These three items might well be accepted as the major ideals of the industry, as they embrace the fundamentals of successful pursuit.

Regarding the question of ethics, we need higher moral concepts supporting our business standards and practices. I am not unmindful of the need of continual development in technical supervision with continual care and vigilance in the business management of our respective enterprises. The material problems of manufacturing, selling and distributing, require and will continue to require unceasing attention, but the problems of our industry are not wholly technical or material, they are more essentially a combination of mental and moral problems.

Great truths sometimes lie so close to us that we are constantly overlooking them. We are often lured by the "enchantment that distance lends" to look for political panaceas, and miracle workers to solve our problems when all that we really need is to apply some of the old and simple laws upon which successful business and harmonious human relationships are predicated. It is not always safe to assume that new thought is progressive thought.

There are basic things—fundamental principles—that bear the same relationship to business that sanitation bears to health. In each instance they represent the foundation upon which successful structures are built. Among these basic things in business are the so-called, intangible or spiritual features which every business has to a greater or lesser degree, and which give it life, charm, purpose and reality. They are wholly apart from the equations of pounds and tons, chemical formula, engineering data, financial statistics or the materials to which they refer.

The Real Business Structure

One of our national advertising agencies has said, "everybody knows that stores and factories, banks, warehouses and terminals are but the outside symbols of business. Back of each of these there arises shadowy and vast, the great structure of the real business. Based on good will, bound together with dealer and consumer contacts, cemented with fair dealing, this invisible structure rises slowly behind every honest enterprise."

"The master builders of today know that this invisible property can be planned and erected as definitely as a structure of concrete and stone."

These items or features may truly be called spiritual factors of business and they consist largely of sentiment despite the common belief that "there is no sentiment in business."

I always smile when I hear someone say "there is no sentiment in business," or that "business is a cold, hard, impartial measure of efficiency in the exchange of commodities and moneys." If they live long enough and profit by the experience that life will surely bring they will learn that sentiment is the most important thing about business.

In times past the mistaken world has assumed that a business meeting should only deal with material and political problems, and that clubs, lodges, schools and churches were the places to discuss moral, ethical and spiritual subjects. Anyone who had the temerity to bring such subjects before an audience of business men was likely to be judged "visionary and impractical."

Thanks to the spirit of progress, times have changed. With a constantly increasing ratio business men are learning that these so-called impractical things are of more importance to them than they are to any other class of people. Neither the clergy, the educators or the fraternalists have a great-

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er mission or responsibility than have the business men in the work of advancing human welfare.

Sunday religion, Wednesday Rotary and Friday night lodge will not avail much without the supplement of business statesmanship. If we would reach the high destiny of our hopes in the industry of which we are a part, we individually must carry high precept and example into our offices, stores and factories, or wherever men or women congregate in vocations of service.

In concluding this thought I reiterate—there is nothing so important nor as much needed in our industry as that of a higher appreciation and more studied application of ethics in our business relationships with our employes, our competitors and the great buying public, or, in a word, we need "moral sanitation."

Pride of Craft

Now, just a few words regarding "Pride of Craft." Throughout the entire period of my employment with western confectioners which has been about one and one-half years I have constantly pressed to their attention the high potential character of their business and the service it portends. I have classified them as "Aristocrats of Industry" and sought to convince them that they belonged to "The Royal Family of Crafts," like which there are but few. Only those who manufacture such things as precious and beautiful jewels, rare perfumes and fine works of art, or who cultivate fragrant flowers, belong to this industrial aristocracy, and when they grow to appreciate the fact, they will lift their industry up to a higher plane, and automatically relieve it of many of the sordid irritations with which it is now afflicted. Which is to say that better ethics will follow our effort to increase our self respect and our "Pride of Craft."

Self respect is the grace by which we insure the respect of others, and self abasement begets in kind. An individual who deliberately pursues the ways of weakness and debility is not a self-respecting person. By the same token an industry whose constituents continuously violate the principles of "confidence, integrity, fair-dealing and mutual service," is not a self respecting industry.

If this line of reasoning is tenable, and I think it is, does it not follow that a confectionery industry as a whole is not a self-respecting industry? Pardon me if that sounds harsh. It is intended to illustrate a point that I think is important. The point is—we need a great stimulus to our "Pride of Craft."

Men—our work is potentially important and significant. Let's make this importance and significance a reality. Let us look with sober eyes beyond the machinery and equipment of our factory—beyond the sugar, corn-syrup, chocolate, nuts and fruits of our raw material warehouses—beyond even our choicest finished products—to see and understand the great purpose of our effort. To see the need of faith, courage, integrity and brotherhood in our relationships to our fellows.

The third need equally important is for the maintenance of well established standards for sanitation and hygiene which will conspicuously index confectionery as the product of the aristocrat of all food industries.

Stimulating Influence of Co-operative Marketing

It may have occurred to some of you to ask—"What has all of this to do with co-operative advertising?" If so, my answer is—"It has a great deal to do with it. It constitutes the principal reason and need for co-operative advertising. What I have said is all true and I am now going to pronounce another truism. There is no single agency that would have as much influence towards the correction of the evils that beset us—that would encourage the expression of better ethics—that would stimulate "Pride of Craft"—that would necessitate standards of sanitation and hygiene — as would our united support of an intelligently planned co-operative advertising campaign. I regret the time will not permit me to enlarge upon that statement, but I am sure a little thought will make it obvious to each of you.

I will say as touching the subject, however, that *when we begin to make public declarations in written word of advertising copy regarding the significance of our industry and the service it is rendering we will be making a more strenuous effort to live up to our ideals.*

In approaching the subject of co-operative advertising, permit me to explain that in our consideration and promotion of the plans we have adopted, we have had no thought of inter-

Extending the Market for Gift Merchandise

"FLOWERS belong to that group of merchandise that is nearly always bought for gift purposes. Very few persons ever buy flowers for themselves, except for entertaining. The problem, therefore, in selling flowers has been to get more persons in the habit of sending flowers as gifts and to extend the number of occasions when flowers make acceptable gifts. The Say-It-With-Flowers' campaign has been remarkably successful in accomplishing both these purposes.

The Manufacturers of Candy Have Exactly the Same Problem

"Otis Emerson Dunham, president of the Page & Shaw Company, said recently that 75 per cent of the candy his company sells is purchased to be given away. The manufacturers of other high-grade confections could say the same. It is for this reason that it has always been difficult to advertise candy in the ordinary way. Advertising that does not give candy social prestige and gift acceptability misses its opportunity.

"Candy that has been advertised on a price basis or as a bargain proposition loses its desirability for gift purposes. Several candy campaigns have not achieved anything for this very reason.

"It is in this respect that advertisers of gift merchandise in other fields could learn much from the advertisers of flowers."

Editorial in Printers' Ink.

fering with or replacing the splendid publicity work being done by V. L. Price of our national association. Our effort was intended and designed to supplement his work by entering an unexplored field and using an entirely different line of advertising medium. I think, however, that we made a serious error in not making this clear to everybody before we initiated our experiment. I think we excited some experiment. I think we excited some resentment on the part of those who considered our effort presumptuous, and I believe we merited criticism whether we received it or not.

The question of co-operative advertising presents various real problems, but I think that none of them are as serious as the single obstacle of the general opinion that without the unanimous support of the firms of the industry we cannot succeed with it. I have very frequently heard the expression that "there is no use talking about co-operative advertising unless we can get everybody in."

Many business men ridicule the idea of co-operative advertising because it looks like a joke to spend money to boost a competitor's business. However, that idea is rapidly giving way to a broader one and co-operation in advertising in every direction is rapidly gaining ground.

It occurs to me that the presentation of this question for our purpose might best be directed to the answering of the most common questions that are asked regarding it. Some people have said: "Why should we advertise at all?" Others have said: "Is there a real competitive need for candy advertising?" The third question that is most common to those who are conversant with the theory of it is: "How shall we proceed?"

In answer to the first question:

"Why Advertise at All?"

It should be interesting to every member of this association to learn what other industries have accomplished by their co-operative advertising efforts. Many industries are devoting their time and money to this great common purpose, but I will just cite the measured and tabulated experiences of a few that have made outstanding success.

The California Walnut Association were selling the American public fifteen million pounds of walnuts annually in 1915. Many of them were dissatisfied and had about decided to plow up their orchards and go into some other agricultural or horticultural line that might be more profitable, but finally decided to try to induce the public to eat more walnuts. They started an advertising campaign showing various new ways in which to use walnuts, supporting their recipes with beautiful pictures. As a result of this effort from the sale of fifteen million pounds in 1915 they advanced to forty-eight million pounds in 1922, and this result was obtained by a group of men who represented only a small part of the industry. People who imported walnuts or raised them in other parts of the country did not join this advertising campaign, but enjoyed the fruits of the increased business that it produced. This is the penalty that the promoters of co-operative advertising must pay in any industry. If we waited until we got 100 per cent to join it could never be brought about.

Another example is that of the orange people. In 1909 every man, woman and child in the United States were consuming an average of 37½ oranges per year. Then they began the campaign of the California Orange Grove Association with the result that by 1921 the average had gone up to 60.2 oranges per capita.

Another example is that of the Florida Citrus Exchange in the sale of its grape fruit. In the years 1918-19 933,000 boxes of grape fruit were sold. In 1922, 2,307,000 were sold The cost to the grape fruit producers was 10 cents per box per year for advertising "Sealed Sweet" grape fruit, and the remarkable part of it is this, that despite the fact that they had only 40 per cent of the grape fruit acreage of Florida represented and despite the fact that the best grape fruit acreage was not under this brand, they averaged much more in price than the other grade shippers who did not advertise under this brand in Florida.

Another very interesting example is that presented by the bread industry of the country. In 1917 the average man, woman and child of the United States consumed 74 pounds of bread annually. At that time Fleischmann began his advertising campaign with the result that in 1921 they ate an average of 122 pounds of bread, showing an increase of something like 60 per cent.

While another example is that of the raisin growers. In 1912 there were sold to the American public 70,000 tons or 140,000,000 pounds of raisins and each one of us averaged approximately 1.4 lbs. In 1914 the average was the same. There was no increase until they began telling the public about the value of raisins. Now each of us are eating four pounds, or, instead of 140,000,000 lbs. we are consuming 440,000,000 lbs. annually in the United States.

Another example is that of the kraut packers. Taking the years 1918-20-21 as 100 per cent normal, they have by telling the American public about kraut increased their sales 275 per cent in the year 1922-23.

The coffee people present another interesting experiment in cooperative advertising. Before the war every man, woman and child drank on the average of 39 cups of coffee per year. Coffee producers raised $250,000 toward an advertising campaign and employed professors of the Massachusetts Institute of Technology to show that coffee did not keep people awake at night and also other data favorable to it and by capitalizing that information they sold the American public as much coffee as they had ever sold them before and an added amount of one billion, six hundred and seventy million pounds at a cost of $250,000, or the united cost of 7/10ths of a mill per pound on their increased business.

There are other instances too numerous to mention. California SunKist campaign is one that is notable for the increase in consumption of fruit products that it represents. The lowly humble prune has been elevated by the magic wand of publicity. The wise directors of its destiny allowed the sun to kiss it and then "told the world" about it. It now finds a place on the tables of the aristocrats where formerly it was only included in the boarding house diet of the sheep-herder and lumber jack. Recently while passing down Market street I noted a beautiful window displaying prunes stuffed with other delicacies offered the buying public at $1.00 a pound.

One of the most startling things in all the cooperative advertising data that I have reviewed is revealed in the experiences of the pineapple packers. The total pack of the association of Hawaiian pineapple packers in 1909 was 401,940 cases. In 1919 the pack had increased to the amazing figures of 5,072,000 cases. The additional startling feature about this is that in 1909 there were sold in the United States 778,000 crates of fresh pineapple while in 1919 the sales of fresh pineapple had shrunk to 26,000 crates of fresh pineapple so that we see one division of an industry making tremendous strides in the same period in which an unorganized sister division becomes practically extinct.

The advantages of cooperative advertising in industry might be multiplied indefinitely. The authors from whom I quote the above data make the general observation in a resume of their investigations which shows the annual per capita increase of raisins, bread, oranges, pineapples and walnuts has been 35.8 per cent per year since these industries first began their campaigns of cooperative marketing.

But the Candy Industry Is Different

No doubt many of our confectioners will advance the argument that candy is different to the commodities mentioned but when we take into account the true picture of progress that is presented by this data and showing a volume increase of 33 per cent per year for their advertising effort, is it reasonable to suppose that candy is sufficiently different that a greatly increased volume could not be had by similar tactics? If we could increase candy consumption 10 per cent, or even 5 per cent per year for a few years we would have a continuous healthy market.

Attention has frequently been called to the fact that candy differs from most products that are being nationally advertised, due particularly to its great variety of forms, flavors, character and quality, and that therefore, it would not conveniently lend itself to the cooperative advertising plan. In answering this objection I would call your attention to the national movement known as, "Save the Surface and You Save All" campaign of the Paint and Varnish people. There are probably as many varieties, colors, forms and qualities of paint and varnish as of any other known commodity. It is sold in liquid, dry and paste form. In some instances it consists of a cheap filler; in water, in others fine pigments ground in oil with all the wet and dry stages between. Assuredly if paints have been successfully advertised, confections can be.

"Is There a Competitive Need for Candy Advertising?"

Let me recall to your mind the experience of the pineapple people where one division of that industry practically annihilated another division by the simple method of legitimate advertising.

We have many competitors that are producing food commodities that are so much like candy in general constituency that we may well fear the consequences if the producers of such commodities undertake progressive and aggressive advertising while we stand still. Manufacturers of crackers are doing effective individual work and their product is a direct competitor of ours, and the ice cream people are starting their national cooperative advertising and their product is assuredly a direct competitor of candy. The same is true of various fruit and nut and chocolate compounds that are prepared by others than confectioners. The safety of our industry lies in keeping the public mind focused upon the advantage of our product as the utmost in delicious sweets. If we neglect this opportunity we will assuredly regret it—in fact, I think we are reaping the disadvantages today that will cost the proverbial "pound of cure" which the "ounce of preventative" might have enabled us to avoid.

In addition to the field of direct competitors we have also the indirect competitors, particularly in that branch of production which caters to gift package trade. There are many commodities produced exclusively for gift purposes that are indirect competitors of candy. It is my opinion that every trinket and jewel for personal or home adornment that sells for less than $5.00 is an indirect competitor of candy. The same is true of perfumes, greeting cards, flowers, certain kinds of glassware and silverware, trinkets, particularly in works of color, sculpture and needle art, also various beauty compounds that are prepared in gift package form. It is noticeable too that among the items I have mentioned as indirect competitors to candy—some are very extensively and aggressively advertised.

It does not require any long stretch of the imagination to see confectioners losing business to these indirect competitors unless we are willing to "tell the world" and continue to tell about the wonderful significance and delicious character of our products.

Assuming that the majority of our membership are converted to the idea that some kind of advertising should be done:

"How Shall We Proceed?"

I shall not attempt to give a technical review of all the influences that may be utilized to cause people to purchase candy but there are three distinct divisions that impress me as being the outstanding ones as opportunities to appeal to the consuming public regarding the merits of our product. I classify them in the order of their importance as they appeal to me:

First, the appeal to the sweet tooth or appetite. This has long been the outstanding motive of candy purchases. People have bought candy because they liked the flavor of it and enjoyed their reaction to its delicious effect upon their appetite appeal for a rich delicious food. This I classify as the greatest opportunity and pulling force to sell candy and it is being utilized already to a very great extent by the beautiful candy displays that meet our vision at almost every step of our travels, but this field still offers great possibilities of enlargement.

Second, the appeal to the sentimental or aesthetic instincts of the buying public. This is practically a new field, one in which the western confectioners have launched their preliminary campaign and which we believe has amply repaid our effort. In casting about for evidence as to whether or not the sentimental appeal is consistent with intelligent advertising procedure, I have reviewed the ads of many master writers of advertising copy in the last year with the purpose of discovering whether or not any of them were making an emotional or sentimental appeal to the buying public. My discovery has been astonishing to me. I have found that my early conclusions which were recited at San Francisco convention last year have been more than borne out in the evidences that I have gathered.

In addition to sentiment being used in connection with jewelry, perfumes, flowers, fine glassware, beauty compounds, toilet soaps and candy, I find direct usage of the same influence being exerted by the master writers of advertising copy printed in national publications supporting the sale of trunks, silverware, paints and varnishes, oil stoves, laundry machinery, autos, salad dressings, jello and other food products, and last but not least, the meat packers have introduced the romantic stories of the pioneer west in their advertising copy.

I cite these facts to you fellow confectioners as an evidence that we are not following but leading the procession of thought in this particular matter. We have taken a step farther than anyone else in actually and deliberately capitalizing sentiment and romance and in my opinion the time will come when its usage will be general for the purpose of promoting the sale of candies.

We have been flattered by the great amount of interesting publicity that has followed our effort and we are also sincerely complimented by the manner in which our copy has been used and imitated for the purpose of getting over the same thought in support of the sale of other kinds of merchandise.

Much more could, and probably should, be said on this subject but in

the interest of brevity I will not enlarge upon the thought nor abuse the opportunity of presenting it.

The third influence to be utilized as a buying appeal is that of the food values of candy. I am free to confess to you that this does not appeal to me as being as wide a field as I had thought it was on first consideration. In order to advertise candy as a food we must advertise the things of which candy consists which primarily goes back to telling the people of the food value of sugar, chocolate nuts and fruits, etc., and in my opinion the consuming public will not be nearly as much influenced by food values as they will by the other two things I have mentioned. It does, however, offer another unexplored field and should be utilized for all that it may be worth.

My thought has been that candies retailing at less than 60c a pound might lend themselves to the influence of "food value" advertising, but when you get higher than that you will be handicapped as people are inclined to think more in terms of economy when food purchases are in question. While, on the other hand, people who are guided by appetite or sentimental and emotional impulses rarely consider price. It is merely a question of satisfying their taste or other opinion of a consistent expression of their feelings of affection for someone. I can readily visualize candy selling in a jeweled box at $5.00 or $10.00 for two pounds or five pounds by making the proper sentimental appeal to the prospective purchaser who could afford such a compliment to his lady love. Food value, however, suggests economy and I should say no price exceeding fifty or sixty cents a pound could be profitably tied up with the thought. It is, however, true that the great bulk of confections are sold at prices which would bring them within the range of consistent food value advertising, and they might be favorably contrasted with other food products of similar or equal cost per pound by a comparison of the number of calories contained in each and a suggestion that they are healthful and economical desserts.

Definite Steps in Western Campaign

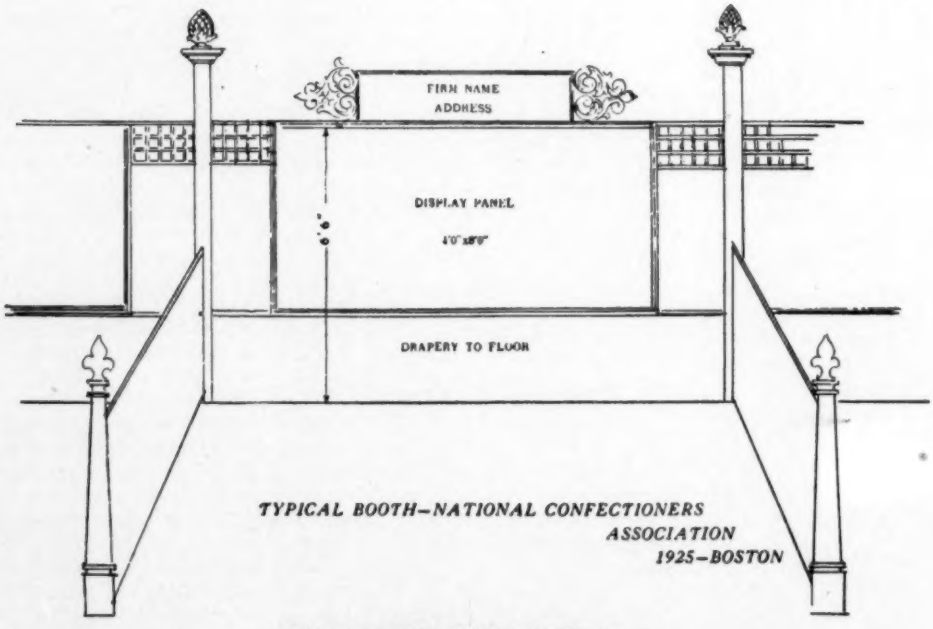
We have various printed matter here for illustrating some plans and purposes that the western confectioners have in mind, which I will display and explain and from which I have recommended a definite campaign of procedure to them, designed to introduce them into the real field of cooperative advertising.

(*At this juncture Mr. Taylor showed sketches which are being considered for both interior and outdoor advertising.—Ed.*)

We have arranged to use picturized printed matter in fine art work, which runs true to candy history and mythology. We have a series of sixteen insert cards worked out—four of which are already issued—and the succeeding ones will be more beautiful because they will be printed on whiter or heavier stock than was used in the first issue. We are also working out a series of designs for counter and window cards, for display in the better stores which will carry our slogan, "Candy—The Messenger of Sentiment."

I believe the confectioners are in a frame of mind at this time to initiate a movement which will ultimately become a national movement. It will require courage and effort backed by financial support, but insofar as the financial support is concerned, it is my opinion that it will not be an expense but an investment from which they will ultimately reap a very satisfactory return.

Our advertising committee have been authorized to employ advertising counsel in order that we may insure effective and economical procedure.



TYPICAL BOOTH—NATIONAL CONFECTIONERS ASSOCIATION 1925—BOSTON

ON TO BOSTON JUNE 1-5

The 1925 Convention and Exposition of the National Confectioners' Association will be held under one roof in Mechanics' Hall at Boston the week of June 1st. ....

Fundamental Steps of a Pure Food Foundation — for the Confectionery Industry

Pure candy begins with a clean conscience—an instinctive desire to produce and handle confectionery under the most wholesome, healthful working conditions.

A survey of sanitary conditions, policies and methods is being made as a basis for drafting a code and manual of cleanliness, sanitation and hygiene for the manufacture and handling of candy. Such a manual will contain suggested standards and methods for the guidance of superintendents in maintaining proper factory conditions. The co-operation of our readers is especially desired.—Editor. ....

$80,000 Worth of Cleanliness

A Chapter from the Experience of

Arthur F. Symmes

Factory Superintendent, H. D. Foss Co., Winona, Minn.

SOME recent articles which have appeared in THE MANUFACTURING CONFECTIONER have brought very vividly to my mind an experience which is very tangible evidence of the commercial value of plant cleanliness and sanitation. An experience which proved that cleanliness throughout the manufacturing end of the candy business pays in more ways than those of efficiency, personal pride and the opinions of the consumer. It is a story of how a small candy manufacturer in the east succeeded in getting $80,000 in additional capital and how the matter of sanitation became the deciding factor in the deal.

In 1917 I accepted a position as head candy maker for a small firm in a certain New England city, who owned and operated three retail candy stores in the heart of the city. The candy kitchen was located upon the outskirts of the city.

I shall never forget the first day that I started to work there, for upon entering the candy kitchen it seemed to me I had never seen such a dirty hole for candy making. Cigar butts, old pipes, wormy nuts and candy soiled paper, torn paper boxes, dust, cockroaches, mice and other vermin seemed to be present in super abundance.

It took several people several days to give the place a thorough cleansing with boiling hot water and soap before I would consent to even start making candy which I felt we could conscientiously offer the public for its approval.

Then we started making the very best candy we knew how to produce, and within six months our business had increased to an extent that we were forced to secure larger quarters and took the three top floors of a six-storied building near the center of the city.

We then started manufacturing on a small wholesale scale for other retail stores than our own. Six months later we leased the entire building. (Remember this was in war times.) As the business continued to increase, it became necessary to add new equipment and to increase our capitalization in order to take care of that and other expenses.

The treasurer and general manager of the firm had wealthy friends in New York and he induced one of them to come to our city and look over our plant with the object of persuad-

Fire Hazards of Chocolate and Cocoa Plants

T. A. Gore

IN MOST lines of manufacture presenting certain characteristic fire dangers, it is found upon anlyzing loss reports of such occupancies that the so-called "common hazards" are responsible for more destruction than the "special" hazards. This is true of the plants making cocoa and chocolate, according to a record of one hundred and forty-two fires in these establishments compiled by The National Fire Protection Association, which shows that 63 per cent of the known causes responsible for ignition were "common" and that the balance of 37 per cent were "special."

The common causes were those connected with the heating and lighting systems, the use of matches and smoking materials, the presence of rubbish and similar items. Candy boiling was charged with 8.5 per cent of the fires; roasting beans with 7 per cent; sugar pulverizing with 6.3 per cent and dry rooms with 2.1 per cent.

The special hazards of the occupancy are similar to those in general candy making, due to the employment of bean roaster, dry rooms, heating kettles, sugar pulverizing and refrigerating systems.

There is no part of a chocolate factory that is not adapted to protection by automatic sprinklers, and the loss record mentioned indicates clearly the value of such safeguards. The total loss in thirty-four fires occurring in sprinklered risks, for example, amounted to $87,940, as against destruction of $824,952 in fifty fires involving unsprinklered properties.

The various methods of practice and construction that should be followed in order to make a chocolate plant reasonably fire-safe, may be summarized as follows: The building should be in accordance with the standards for "fireproof" construction, with stairs and elevator wells cut off in proper manner. All floor openings, such as chutes and other vertical passages should be equipped with trap doors operating automatically in case of fire. Windows should be of wired glass in metal frames, so as to protect against exposure, and floors should be waterproofed and scuppered.

The drying and roasting rooms, as well as the cocoa grinding and sugar pulverizing sections should be cut off from the rest of the plant by fire-walls equipped with automatic fire-doors.

The power plants should be located in a detached building, or cut off in proper manner.

Cooking, roasting and melting are safest when done by steam. Where there is a refrigerating system employing combustible refrigerants, or brine circulation with ammonia, the plant should be cut off or detached.

Throughout the plant the electric lamps should be equipped with vaporproof globes, and switches should be placed outside of the sugar pulverizing and cocoa grinding rooms.

Where the use of gas is necessary, all jets should be controlled by one master valve and if electricity is used for heating purposes, there should be pilot lights in the circuit.

Where roasted cocoa beans are turned out into large trays connected to an exhaust fan to draw cold air through the beans for cooling purposes, the fan should be connected to a metal or brick flue discharging outside of the building. The husks separated by the winnowing machines should be blown to fire resistive bins. The practice of delivering husks direct to boiler fires introduces considerable hazard and should not be followed. The milling machines present little fire danger, except that due to steam pipes, but they should not be allowed to run without a continuous supply of chocolate nibs since there is a danger of heating the chocolate to the ignition point.

Cocoa grinding and sifting results in the presence of considerable dust and it should be carried on in ventilated enclosures where there are no open lights.

In its regulations for cocoa pulverizing establishments, The National Board of Fire Underwriters says that they have been issued to "eliminate or reduce the hazards inherent in the manufacture of pulverized cocoa, particularly the avoidance of its ignition and the propagation of a resulting fire. It is essential that there should be no escape of dust into the atmosphere of the room, since such a condition is favorable to a dust explosion."

For this reason, it is important that the apparatus be provided with effective appliances to prevent ignition and to confine such fires as may occur.

The proper venting of the apparatus and the ventilation of the pulverizing system are important. All apparatus should be properly and securely installed to insure constant and true alignment so as to avoid hot bearings or frictional sparks; no moving part should be fitted close to or come in contact with any part of the inclosure or the structure.

Various other details may be obtained from

(*Continued on page* 40)

P3 2-36 RacKing

New Home for Sioux Candy Co.

The Sioux Candy Co., of Sioux City, Iowa, have purchased the Baker Overall building, a modern fireproof plant at Fifth and Jones streets, and will move into it at the expiration of their present lease this year.

Mr. W. G. Schroer, president and general manager, and H. J. Stolze, factory superintendent, are both cranks on cleanliness and sanitation and believe these things are the first requisite for successful conduct of a candy manufacturing business. Quoting from Mr. Stolze's letter:

"The Sioux Candy Co., organized in 1919, has enjoyed a steady growth for these five years during which time nothing has been left undone to give the Sioux City territory a candy of quality par excellence and therefore sanitation has been given first consideration throughout the manufacturing end of our business.

"During the past few years many organizations, delegations from schools, clubs, etc., have visited our plant and our company cordially extends an open invitation to the public and encourages such visitations. This privilege may be had at any time by appointment.

"We have adopted a new and exclusive style of washable uniforms for all factory employes as you will note from the photographs clipped from the Sioux City Tribune."

The Frank G. Shattuck Company is to erect a 12-story candy factory at 43-49 West 22nd street, New York City, it is rumored. The estimated cost is $500,000.

The Butter Cream Confectionery Company have bought a factory building at 111 Irving street, Jersey City, N. J.

Gelpi Candy Company, New Orleans, La., has been sold to Joseph M. Meyer and M. M. Kohlman. The sale includes the factory building at 523 Bienville street. The Gelpi Candy Company was opened in 1920 and makes package goods.

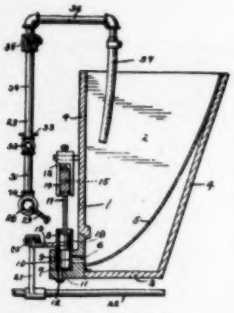
Mr. Meyer, one of the new owners, was for fifteen years a member of the firm of Fuerst and Kraemer.

The Sioux Candy Co. have adopted a new and exclusive style of sanitary uniforms for their factory employees.

WHAT'S NEW?

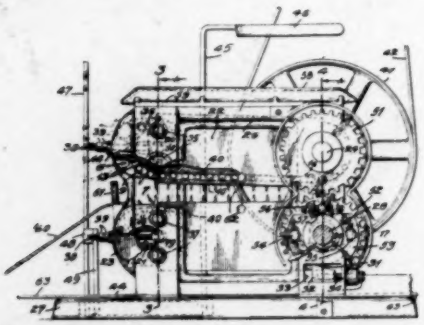
New Patents

1,530,710. Candy-Making Machinery. Frank H. Baumgard, Columbus, Ohio. Filed September 14, 1920. Serial No. 410,129. 1 Claim. (Cl. 107—28.)



In a candy dispensing machine, a hopper, cylinders connected with the hopper for permitting the passage of material therefrom, a header extending longitudinally of the hopper and having jets carried thereby for directing steam into the upper ends of the cylinders, a pipe arranged in parallel relation with the header and in communication at each end therewith, a steam supply pipe common to the header and said pipe, and a pipe connected with the first named pipe for conducting steam to the hopper.

1,530,318. Confectionery-Cutting Machine. Edward G. Oszman, Minneapolis, Minn. Filed May 5, 1923. Serial No. 636,834. 9 Claims. (Cl. 107—20.)

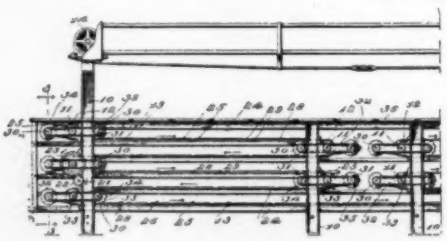


1. A machine of the kind described including two endless link belts arranged with opposing faces, hinge pins connecting the belt links and projecting beyond the sides thereof, guides for the projecting ends of said hinge pins serving to hold the belts for proper travel at their opposing faces, and cooperating cutting blades at the belt links.

5. A machine of the kind described including two endless link belts arranged with opposing faces, hinge pins connecting the belt links and projecting beyond the sides thereof, said hinge pins being free for endwise removal from the belt links, plates having endless guides for the projecting ends of the hinge pins and holding the same against endwise removal, certain sections of said guides being in the form of channels to hold the belts for proper travel at their opposing faces, and cooperating cutting blades on the belt links.

9. A machine of the kind described including two endless link belts arranged with opposing faces, pairs of laterally spaced side plates between which the belts travel, pairs of sprocket wheels at the receiving and delivery ends of the machine, removable hinge pins connecting the links of the belt and arranged to run over said pairs of sprocket wheels, endless guides in the side plates for the ends of the hinge pins which prevent the belts from spreading at their opposing faces and the links from rocking on the hinge pins and also hold said hinge pins against endwise movement, and cooperating cutting blades on the links.

1,531,847. Candy Conveyer. Charles H. Danforth, and Forrest W. Dixon, Cambridge, Mass., assignors, by mesne assignments, to said Forrest W. Dixon. Filed September 16, 1920. Serial No. 410,662. 8 Claims. (Cl. 198—137.)



1. An apparatus of the character described, comprising, in combination, an endless conveyer, means to guide said conveyer in runs, a series of carriers pivotally connected to said conveyer, each of said carriers having elements at opposite sides of the pivotal connection between the carrier and conveyer, a pair of rotary members adjacent the end of each run having recesses for receiving the carrier elements, and means simultaneously to rotate said members to hold the carriers horizontal during their transfer from one run to another.

The Retailer's Point of View

Remember the retailer is part of your selling organization. In deciding sales policies a few interviews with representative retail dealers will often prove very valuable in making wise decisions.

This article was crowded out of the Sales Managers' number last month. The interviews with retailers as reported herein were made by Ralph G. Wells.

THIS discussion on candy selling would be incomplete and out of balance if the retailer's viewpoint was not presented, therefore, the gist of interviews with retail candy dealers is given below in brief. Instead of sending out a direct questionnaire, we have secured this information through informal conversations, because this method brings out a man's real viewpoint better than if he prepared an answer. Here are a few of the more striking comments. We have not attempted to evaluate them. Each, therefore, represents the particular viewpoint and judgment of only one dealer.

"Most candy is too sweet and too rich," said a dealer with a healthy, well assorted candy department. "People like it, but find that they can't eat it as freely as they would like to. While we sell lots of the more fancy candies, I notice that our regular customers buy such items as peanut brittle, taffies, caramels, marshmallow, nut or fruit combinations. I don't think it is the price so much as the fact that they want something that they can eat freely without feeling surfeited."

In the same tenor was the comment of a restaurant man that candy was not popular as a dessert because it was "too concentrated." He claimed that many people counted on their desserts to help fill them up. They wanted volume as well as "sweetness." Hence, the popularity of puddings and pies which give substance as well as flavor. He offered as evidence the fact that some people crave candy after a full course dinner more than after a simple meal.

The "Stand-bys" Hold the Trade

In answer to the question as to whether new varieties or old-established kind sold the best, opinion seemed to be divided. One dealer expressed the prevailing sentiment in this way: "We need the new kinds to attract new customers and the casual buyer, but it is the old stand-bys that hold the trade. People get in the habit of taking home a certain kind each week end. Occasionally they change or want something new, but we notice that they keep coming back to the same old kinds. Not infrequently we fill our windows with a display of some good standard piece that might well be called old-fashioned. You would be surprised to see how many come in and buy just for old time's sake. *We continually have calls for some of the old favorites that we can no longer get.*

"It seems to us sometimes that just when we have built up a good trade on a popular item, the manufacturer stops making it, and we lose the advantage of repeat sales, which, after all, are the foundation of any staple business.

"Men are more consistent in their tastes and less prone to change. They like to buy the same thing week in and week out for themselves and their families. Of course, it's different when they are buying for their best girl. Then they strive for effect and seek something that will make an impression."

Another retailer suggests that the brand and style of wrapper should be changed frequently on cheaper grades, but that finer qualities should always bear the same distinctive brand. It is his claim that a well-known firm, making quality goods, does itself more harm than good by putting out several grades under the same general trade-mark or firm name. "To be sure, each grade has a separate brand, but the firm name is more prominent than the brand. This results in confusion. People can't understand why they should pay $1.25 per pound one time for So and So's candy when they have been in the habit of getting it for 60 cents or 80 cents a pound. Furthermore, customers whose taste is for the better grade, sometimes get hold of the cheaper brands and decide that So and So's candy is not dependable, or that the quality is so poor that they will not buy it again."

The net impression received from conversation with various retailers is that any manufacturer will find it well worth while visiting personally the leading retailers, not for the purpose of selling, but solely to get the retailers' viewpoint. But before he will open up he must be convinced that the interviewer is not trying to make a sale and is not using the conversation as some new kind of sale approach.

SOURCES OF INFORMATION FOR THE FOREMAN GROUP

(*Continued from page* 15)

published matter relating to job analysis. Similar researches have been conducted by the Harvard University Bureau of Vocational Guidance and the Massachusetts Institute of Technology.

The Department of Industrial Research of the University of Pennsylvania Wharton School of Finance and Economics recently conducted an investigation into foreman training at the request of the Philadelphia Association for the Discussion of Employment Problems, with the purpose of measuring the results of a 20-week course for foremen given by the association to foremen employed in local plants. The investigators interviewed a considerable number of the 700 foremen who had taken the course.

The vocational division of the Massachusetts Department of Labor, which had inaugurated a program of foreman training, undertook also the task of training as conference leaders representatives from a number of different industries in the various industrial centers. These men were subsequently returned to their respective plants to assume duties as conference leaders.

Although not directly carrying on foreman training courses, the division of vocational and extension teaching of the New York State Department of Education engaged in making general industrial surveys and established summer courses for the training of class and group leaders for foreman training in industrial plants.

Researches along this line have also been made by the Employment Managers' Association, Boston, Mass.; Industrial Relations Association of America, Newark, N. J., originally organized as the National Association of Employment Managers; the National Association of Corporation Training, New York, which maintains a standing committee on foreman training, and the Scott Company Laboratory, Philadelphia, Pa. This last organization conducts investigations into the psychological factors in industry. It was organized by Dr. Walter Dill Scott, who, during the war, served as director of the Committee on Classification of Personnel in the Army.

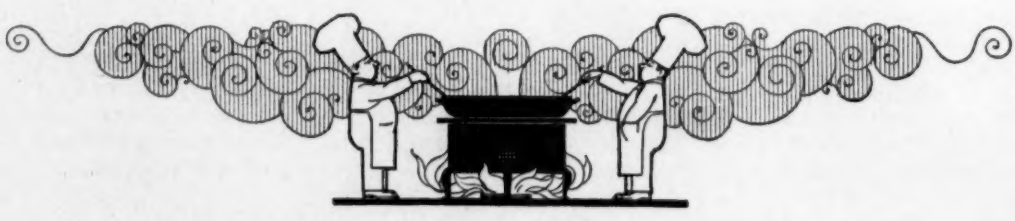
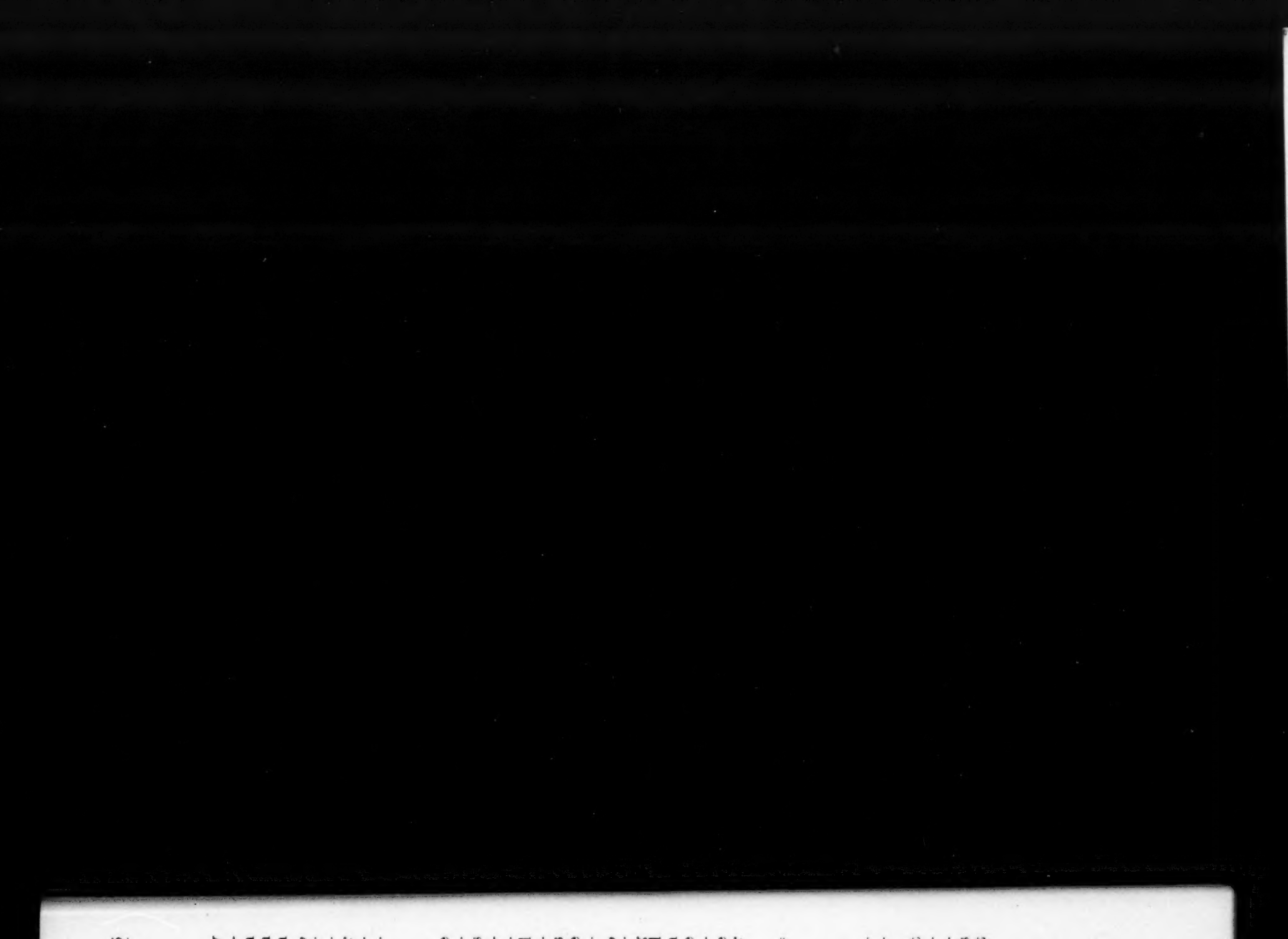
The Trade Paper

The conference leader should also make abundant use of the trade papers of the industry. The information incorporated in articles in a periodical like THE MANUFACTURING CONFECTIONER is of more than current interest. Articles of a more or less technical nature, and especially those dealing with personnel management, processes, new inventions, cost elements and distribution of the final product could be used together with the texts as the course progresses. A good practice is to clip the articles, classify and file them for ready use as the program demands. For instance, a group meeting devoted to a discussion of cost elements could very well be illustrated with actual material on the subject published in the periodical. The use of the material during the conference meeting will encourage the foremen to read the trade papers, a habit which they will retain long after the completion of the course.

FIRE HAZARDS IN THE MANUFACTURE OF COCOA AND CHOCOLATE

(*Continued from page* 33)

the regulations mentioned, but before closing, it should be said that sprinkler equipment with an alarm valve is highly desirable and that there should also be emergency protection in the shape of pails of water or chemical extinguishers and night watchman service should be maintained.

The escape of cocoa dust should not be tolerated and it is recommended that the interior of the pulverizing department be painted a color contrasting with that of the dust so that deposits will be readily detected.

"Good housekeeping" is a most important factor; all rubbish and sweepings should be deposited in metal barrels having self-closing covers, and excelsior and other packing materials should be kept in a section cut off from the rest of the plant.